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<b>13. SUPPLEMENTARY NOTES</b>					
<b>14. ABSTRACT</b>  The mission statement of the Lung Cancer Biospecimen Resource Network (LCBRN) states that the LCBRN will collect, annotate, store, and distribute human lung cancer biospecimens in a manner that embraces the highest ethical standards for human subjects research, that conforms to the best practices of biorepository science, and that furthers basic, translational and clinical research in the understanding, diagnosis, and treatment of this disease. Year 4 of the award has been spent increasing subject enrollment at all sites, tracking follow-up specimen and data collection, building on the informatics infrastructure to support sample searches and distribution, performing histologic and molecular quality control, and serving LCBRN investigators.					
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## **Section I: Introduction**

The mission statement of the Lung Cancer Biospecimen Resource Network (LCBRN) states that the LCBRN “will collect, annotate, store, and distribute human lung cancer biospecimens in a manner that embraces the highest ethical standards for human subjects research, that conforms to the best practices of biorepository science, and that furthers basic, translational and clinical research in the understanding, diagnosis and treatment of this disease”. The specific aims to support this program include: 1) the creation of a Coordinating Center at The University of Virginia (UVA) that provides standard operating procedures (SOPs), standardized specimen collection kits, informatics infrastructure, quality control procedures and specimen storage as well as being the contact site for investigators using the resources of the LCBRN, 2) the creation of Biospecimen Resource Sites at UVA, the Medical University of South Carolina (MUSC) and Washington University in St. Louis (WUSTL) that will recruit subjects with lung cancer and procure the biospecimens, and 3) the establishment of a centralized biobank of high quality tissue, blood, urine, bronchoscopic washing and saliva samples from lung cancer subjects that are annotated to clinical, laboratory and radiographic data.

## **Section II: Progress**

### Subject and Follow-up Accrual

UVA, MUSC, and WUSTL received human subjects regulatory approval to begin recruiting patients on 03/17/2011, 04/19/2011, and 04/22/2011 respectively. Because final approval was not obtained until seven months from the start date of the grant period, the LCBRN was behind in its recruitment goal of 50 subjects enrolled per site by the end of year 1. Since then, however, all Resource Sites made up for this deployment lag time by increasing enrollment efforts and exceeding the target enrollment goal every year thereafter. Review of progress was regularly monitored at monthly Coordinating Conference calls.

In March of 2014, the Lung Cancer Research Program (LCRP) voted to provide the LCBRN with additional funds for the continued collection of follow-up data only for currently enrolled LCBRN patients. Active enrollments, therefore, ceased on 08/01/2014, and follow-up specimen collection ended on 09/05/2014. All remaining samples were then shipped to the Coordinating Center from the Biospecimen Resource Sites by 09/20/2014. 764 patients were enrolled in the LCBRN study since the start of the grant: UVA enrolled 254 subjects, MUSC 213 subjects, and WUSTL 297 subjects. An additional 122 subjects were recruited at the collective sites but were subsequently withdrawn from the study due to various reasons, including benign disease, non-lung cancer related disease, or insufficient sample collection.

In an effort to improve follow-up data collection and to foster patient involvement, the LCBRN created a newsletter that was mailed out to currently enrolled patients in February of 2014 (See Figure 1). The newsletter provided information on the purpose of the LCBRN, the types of projects being supported, and emphasized the importance of patient participation in furthering lung cancer research. Patients were asked to call their LCBRN Coordinators to update them on their progress post-surgery.



Figure 1: LCBRN Patient Newsletter (UVA)

## Informatics

The LCBRN's central database stores subject identification, clinical data and tracks all aspects of biospecimen procurement. The patient, specimen, QC, search, and specimen inventory modules of the database are fully operational and are being used at the Coordinating Center and all Biospecimen Resource Sites. During this last year, the Informatics team finished building the search functions of the LCBRN database which allows the Coordinating Center to target samples for distribution. Figure 2 is a

screen shot of the Specimen Search module. This latest version is able to filter out hemolyzed plasma and serum samples as well as fluid samples that were processed 4 hours after collection.

**Specimen Search Module Interface:**

- Navigation Tabs:** SUBJECT DATA ENTRY, SPECIMEN DATA ENTRY, SPECIMEN QC, **SPECIMEN SEARCH**, ADDED/DISTRIBUTIONS, MORE
- Biospecimen Type:** Tissue and Fluid
- Demographics:**
  - Gender: [Dropdown]
  - Race: [Dropdown]
  - Age at consent: From [ ] To [ ]
- Clinical Diagnosis:**
  - Adenocarcinoma
  - Adenocarcinoma: BAC Features
  - Adenocarcinoma: Clear Cell
  - Adenocarcinoma: Metastatic
  - Adenocarcinoma: Mixed Features
  - Adenocarcinoma: Mucinous Features
  - Adenoid Cystic Carcinoma
  - Adenomatous Hyperplasia
  - Adenosquamous Carcinoma
  - Benign
- Therapy History:**
  - ☒ Exclude all therapies
  - ☐ Exclude neo-adj therapy only
  - ☐ Exclude adj therapy only
  - ☐ Include adj therapy only
  - ☐ Include neo-adj therapy only
- Social History:**
  - ☐ Military service
  - ☐ Military exposure
  - ☐ Civilian exposure
  - ☐ Current smoker
  - ☐ Former smoker
  - ☐ Never smoked
- Cancer history:**
  - ☐ No prior malignancies
  - ☐ Family history of cancer
  - ☐ Recurrence only
  - ☐ Metastasis only
  - ☐ Recurrence and metastasis
  - ☐ Withdrawn, Design Disease
- Tumor stage:**
  - ☐ Unstaged
  - ☒ IIA
  - ☒ IIB
  - ☐ IIB
  - ☐ IIIA
  - ☐ IIIB
  - ☐ IV
- Tissue Type:** Malignant
- Diagnosis:**
  - Adenocarcinoma
  - Adenocarcinoma: BAC features
  - Adenocarcinoma: Clear Cell
  - Adenocarcinoma: Metastatic
  - Adenocarcinoma: Mixed Features
  - Adenocarcinoma: Mucinous Features
  - Adenoid Cystic Carcinoma
  - Adenomatous Hyperplasia
  - Adenosquamous Carcinoma
  - Bronchioalveolar Carcinoma
- Tumor grade:**
  - ☐ 1
  - ☐ 2
  - ☐ 3
  - ☐ 4
- Tissue Aliquot Status:**
  - ☐ Pending QC
  - ☒ Banked
  - ☐ Destroyed
  - ☐ Distributed
  - ☐ No FFPE collected
  - ☐ No Frozen collected
  - ☐ Destroyed - Infectious
  - ☐ Missing
- Tissue Details:**
  - Tumor: Fixed/Frozen, Any selected prep type, ☒ Required
  - Normal: Fixed/Frozen, Any selected prep type, ☐ Required
  - Bronchus: Fixed/Frozen, Any selected prep type, ☐ Required
- Fluid Details:**
  - ☐ Exclude samples processed over 4 hours
  - ☐ Include hemolyzed samples
  - Serum: If available
  - Buffy Coat: [Dropdown]
  - Plasma: If available
  - Urine: [Dropdown]
  - Bronchial lavage fluid: [Dropdown]
  - Cell pellet: [Dropdown]
  - Saliva: [Dropdown]
  - ☐ Specify Molecular Requirements
- Fluid Aliquot Status:**
  - ☐ Pending QC
  - ☒ Banked
  - ☐ Destroyed
  - ☐ Distributed
  - ☐ No FFPE collected
  - ☐ No Frozen collected
  - ☐ Destroyed - Infectious
  - ☐ Missing
- Follow-ups:**
  - ☒ All selected followups required
  - ☒ 0
  - ☐ 1
  - ☒ 2
  - ☐ 3
  - ☐ 4
  - ☐ 5
  - ☐ 6
  - ☐ 7
- ☐ Specify Molecular Requirements

Figure 2. Specimen Search module of the LCBRN Database.

The informatics team also finalized a module to track investigator and specimen distribution information. This distribution module allows the Coordinating Center to easily assign large number of specimens to one investigator for distribution. Once the samples are assigned, Subject and Specimen Detail Reports are generated through JasperServer Reports and accompany all samples shipped to investigators. Figure 3 is a snapshot of the distribution module.

**ADD/EDIT DISTRIBUTIONS**

Distribution ID: LCBRN0021

Investigator Name: Daniels, Karen

Investigator Institution: University of Virginia

Assignment Date: 10/10/2014

Distribution Date: 10/13/2014

Distributed By: RRB

Shipping Method: FedEx - Bill Investigator

Tracking Number: 343213451

Contact: John Smith

Notes:

Subject #	Biospecimen	Aliquot #	Status	
<input checked="" type="checkbox"/>	S0039	Serum	S00642002	Distributed
<input checked="" type="checkbox"/>	S0063	Serum	S00614002	Distributed
<input checked="" type="checkbox"/>	S0117	Serum	S01197003	Distributed
<input checked="" type="checkbox"/>	S0122	Serum	S00295001	Distributed
<input checked="" type="checkbox"/>	V0181	Serum	V02036002	Distributed
<input checked="" type="checkbox"/>	V0196	Serum	V02348002	Distributed
<input checked="" type="checkbox"/>	V0255	Serum	V03260002	Distributed
<input checked="" type="checkbox"/>	W0008	Serum	W00008001	Distributed
<input checked="" type="checkbox"/>	W0087	Serum	W00909001	Distributed
<input checked="" type="checkbox"/>	W0104	Serum	W01134001	Distributed
<input checked="" type="checkbox"/>	W0128	Serum	W01452002	Distributed
<input checked="" type="checkbox"/>	W0167	Serum	W01835002	Distributed
<input checked="" type="checkbox"/>	W0182	Serum	W01805001	Distributed
<input checked="" type="checkbox"/>	W0255	Serum	W02974001	Distributed
<input checked="" type="checkbox"/>	W0280	Serum	W03417001	Distributed

15 aliquots selected

Add aliquot IDs separated by commas

Add Aliquots to Assignment

Save Assignment/Distribution

Distribute Assignment

**Figure 3. Distribution module of the LCBRN Database.**

The LCBRN website (<http://www.lcbirn.org>) has been updated monthly to reflect the current subject enrollment numbers, the percentage of tumors collected, and the percentage of enrolled patients currently in follow-up. In addition, digital H&E images of the FFPE tumors have been updated as they become available. Scanned images can be found on the *Access H&E Images* page of the LCBRN website.

### Standard Operating Procedures (SOPs)

SOPs dealing with biorepository activities are available at the LCBRN Collab online resource (<https://collab.itc.virginia.edu/portal>) and on the LCBRN public website. There have been no significant updates to any of the SOPs during this reporting period.

**Table 1: LCBRN SOPs as of 10/11/2013**

SOP#	Creation date	SOP Title
LCBRN SOP1	11/18/2010	Establishment, revision & documentation of LCBRN SOPs
LCBRN SOP2	12/17/2010	Tissue Procurement
LCBRN SOP3	11/23/2010	Procurement and aliquoting of serum
LCBRN SOP4	11/23/2010	Procurement and aliquoting of plasma and buffy coat
LCBRN SOP5	11/23/2010	Procurement and aliquoting of urine
LCBRN SOP6	1/23/2010	Procurement and aliquoting of saliva
LCBRN SOP7	11/23/2010	Procurement and aliquoting of bronchial lavage fluid
LCBRN SOP8	11/19/2010	Procurement and aliquoting of sputum
LCBRN SOP9	12/01/2010	Shipping of samples to the LCBRN Coordinating Center

LCBRN SOP10	11/18/2010	Venipuncture
LCBRN SOP11	03/24/2011	Creating LCBRN Specimen Labels
LCBRN SOP12	09/15/2011	Informed Consent
LCBRN SOP 13	04/12/2013	LCBRN Informatics
LCBRN SOP 14	04/12/2013	DNA RNA Protein Isolation-Low Molecular Weight RNA
LCBRN SOP 15	04/12/2013	DNA RNA Protein Isolation-High Molecular Weight RNA
LCBRN SOP 16	06/15/2012	Archival Materials Request

### Coordination Meetings and Conference calls

The LCBRN conference calls take place on a monthly basis. Topics for conference calls have dealt with subject enrollment, follow-up specimen and data collection, and informatics. Calls and meetings have occurred on the following dates:

10/25/2013 – LCBRN Conference Call  
 11/22/2013 – LCBRN Conference Call  
 01/10/2014 – LCBRN Conference Call  
 01/15/2014 – EAB Teleconference  
 02/07/2014 – LCBRN Conference Call  
 03/07/2014– LCBRN Conference Call  
 04/11/2014 – LCBRN Conference Call  
 05/23/2014 – LCBRN Conference Call  
 06/27/2014 – LCBRN Conference Call  
 07/25/2014 – LCBRN Conference Call  
 09/12/2014 – LCBRN Conference Call

All meeting and conference call minutes are available on the LCBRN Collab Resource Site (<https://collab.itc.virginia.edu/portal>).

### Biospecimen Collection and Quality Control

Histologic and molecular quality control have been performed at regular intervals on tissue from all 3 Resource Sites. RQI values of 7 or above indicate excellent quality RNA, values between 4 and 7 are considered moderate, and any values below 4 indicate poor quality RNA. The majority of tissue samples from all LCBRN Resource Sites fall into the moderate to excellent quality range (average RQI of 6.1).

The LCBRN distributed 10 RNA samples to an LCBRN approved investigator for a pilot study that would test the presence of tumor cells in the plasma buffy coat samples collected by the LCBRN. Real-time RT-PCR was performed on the buffy coat and was then repeated for direct comparison to whole blood RNA. The results showed that all the signals in the buffy coat prep were substantially lower than in the reference set. Additionally, the LCBRN Coordinating Center performed RNA extraction on 86 buffy coat samples and found the RNA to generally be degraded beyond acceptable quality measures (average RQI of 3.6). The reasons for the loss of RNA stability from the cells in these preparations is unclear, however



given these results, the LCBRN will no longer extract RNA from buffy coat samples. DNA, instead, will be the primary derivative offered from the buffy coat prep.

The LCBRN received feedback from an investigator regarding his inability to use serum or blood samples with hemolysis. It is not uncommon for blood draws to be hemolyzed and for clinical labs to refuse these samples since the hemolyzed red blood cells can interfere with some assays. Because hemolysis can be caused by many factors including difficult blood draws, unsecure line connections, incorrect needle size or handling blood tubes too vigorously, one cannot predict which cases will be affected. Additionally, hemolyzed samples are only able to be recognized after the samples are processed by the biorepository; they are identified by the pink hue of the fluid. Since the LCBRN did not foresee some investigators not being able to use these types of samples, hemolyzed samples were not tracked in the database. In order to address this issue, a line item asking if investigators would be willing to accept hemolyzed plasma or serum samples was added to the LCBRN investigator application and functionality was built into the database to track hemolyzed serum and plasma samples both retrospectively and prospectively.

#### Data Quality Assessment

A data audit sampling the source forms of 15 randomly selected patients from each Resource Site. The purpose of the audit was make certain required clinical data was being collected and captured accurately in the database and that follow-up data was being collected at the specified timelines. Each Resource Sites was also issued a null value report that listed any subjects who have clinical data fields that were missing values in the central database. All Sites were provided feedback regarding any discrepancies in data entry and corrections to the database were made. There were no other significant findings as a result of this audit.

#### Distribution

The Coordinating Center received a total of 94 inquires from investigators seeking information about the LCBRN's resources since the start of distribution. 24 investigators have submitted applications; 15 were accepted without any changes, 6 were accepted with modifications, 2 are pending IRB approval, and 1 was rejected. The investigators with applications that were accepted with modifications were given suggestions to make better use of LCBRN resources, or had research that was deemed too risky and were therefore offered a smaller sample set than was originally requested for the purpose of obtaining preliminary results. The application that was rejected was due to the rare type of tumor requested. A summary of the 1802 biospecimens that have been shipped are outlined in Table 2 below.

**Table 2: 2014 LCBRN Sample Distribution**

# Frozen tumor tissue	24	#Tumor tissue RNA	171
# Frozen non-neoplastic tissue	40	# Normal tissue RNA	33
# Serum aliquots	625	# Tumor tissue DNA	17
# Plasma aliquots	177	# Normal tissue DNA	2
# Urine aliquots	182	# Tumor tissue protein	10
# Saliva aliquots	63	# Normal tissue protein	9
# BAL fluid aliquots	10	# Unstained slides	384
# BAL cell pellet	30	Total # of samples distributed	1802
# Buffy coat RNA	10	Total Amount Invoiced	\$67,547.00
# Buffy coat DNA	15	Total Amount Paid	\$67,547.00

The LCBRN submitted an application to the NCI for their Assay Development Program in September 2013 in response to their request seeking applications from tissue and laboratory resources. The application proposed that the NCI subcontract the LCBRN for any of their lung cancer biospecimen needs, which will in turn help the LCBRN increase sample distribution while providing researchers with a valuable resource. The NCI recently approved the LCBRN's application and distribution will begin in the coming months.

### **Section III: Key Research Accomplishments**

- Exceeded minimum group enrollment goal of 150 subjects enrolled per year
- Created and distributed patient newsletters to increase rate of follow-up data collection
- Designed and deployed the search and distribution modules of the LCBRN database
- Successfully implemented monthly conference calls and annual Coordinating meetings with minutes recorded and kept on LCBRN Collab online resource
- Shipped biospecimens from all Resource Sites for storage at the LCBRN Coordinating Center
- Performed histologic and molecular quality control at the LCBRN Coordinating Center with regular feedback provided to all Resource Sites
- Distributed 1802 biospecimens to investigators, all with positive feedback
- Received approval to collaborate with NCI to increase distribution of LCBRN samples

## **Section IV: Reportable Outcomes as of 10/17/2014**

### UVA - Cumulative Metrics

Number of subjects currently enrolled in study: 254

Number of subjects withdrawn from study: 64

Reasons for withdrawal from study: Benign disease (31), Ineligible to continue (27),

Withdrew consent (6)

Number of subjects withdrawn from follow-up: 46 (deceased)

Percentage of subjects who have tissue collection: 89%

Percentage of subjects who have at least 1 follow-up specimen collection: 72%

Percentage of subjects who have at least 1 follow-up data collection: 99%

### WUSTL - Cumulative Metrics

Number of subjects currently enrolled in study: 297

Number of subjects withdrawn from study: 30

Reasons for withdrawal from study: Benign disease (18), Ineligible to continue (11), Withdrew consent (1)

Number of subjects withdrawn from follow-up: 62 (deceased)

Percentage of subjects who have tissue collection: 80%

Percentage of subjects who have at least 1 follow-up specimen collection: 50%

Percentage of subjects who have at least 1 follow-up data collection: 97%

### MUSC - Cumulative Metrics

Number of subjects currently enrolled in study: 213

Number of subjects withdrawn from study: 28

Reasons for withdrawal from study: Benign disease (8), Ineligible to continue (19), Withdrew consent (1)

Number of subjects withdrawn from follow-up: 22 (deceased)

Percentage of subjects who have tissue collection: 85%

Percentage of subjects who have at least 1 follow-up specimen collection: 53%

Percentage of subjects who have at least 1 follow-up data collection: 83%

### LCBRN Consortium - Cumulative Metrics

Number of subjects currently enrolled in study: 764

Number of subjects withdrawn from study: 112

Reasons for withdrawal: Benign disease (57), Ineligible to continue (57), Withdrew consent (8)

Number of subjects who died during the study: 130

Percentage of subjects who have tissue collection: 85%

Percentage of subjects who have tumor tissue collection: 78%

Percentage of subjects with a military history: 20%

Percentage of subjects who have never smoked: 9%

Percentage of subjects who are Caucasian: 90%

Percentage of subjects who are male: 52%

Mean age of subjects: 65 years

Number of applications received: 24

Number of applications approved: 21

Number of samples distributed: 1802

Total amount invoiced: \$67,547.00

Total amount received: \$67,547.00

## **Section V: Conclusion**

The LCBRN has met the majority of the organizational metrics laid out in the Statement of Work for Year 4. Whereas the consortium was expected to enroll 600 subjects from the start of the grant, it has instead enrolled 764, easily surpassing its goal of 150 subjects enrolled per year. In addition, the majority of tissue specimens collected thus far by the LCBRN have passed both histology and molecular quality control metrics, with feedback mechanisms in place to achieve improvements where needed. The LCBRN is also successfully reviewing applications for suitability and distributing samples to investigators, all of whom have given positive feedback. Concerns regarding the underutilization of LCBRN resources were addressed with rigorous marketing efforts to increase its visibility in the research community. This campaign was undertaken in August 2013 and helped to improve awareness as depicted by the increased number of inquiries received by the Coordinating Center. The Coordinating Center will send out another marketing email in November 2014 to the Directors of all NCI-designated Cancer Centers and to 187 researchers who have applied to the NIH for a lung cancer grant and thus are likely to utilize LCBRN resources. In addition, the forthcoming collaboration with the NCI for their Assay Development Program will also help to increase LCBRN sample usage.

Although new subject enrollments and specimen collection have ceased, the LCBRN is committed to the outcome of this project, which is a bank of high quality and highly annotated biospecimens from lung cancer patients that will support research into the molecular basis of this disease, the discovery of diagnostic and prognostic biomarkers, and the validation of new biomarker assays. Samples will continue to be distributed under the support of the Department of Defense CDMRP until a plan to absorb any remaining biospecimens into the Cooperative Human Tissue Network (CHTN), for which the LCBRN Coordinating Center P.I. is a member, is complete. It is a priority that this valuable resource remains available to the general research community, with a panel of experts ensuring its judicious use by projects with a significant likelihood of creating new knowledge of human lung cancer and innovative tools for the diagnosis and treatment of this disease.

## Section VI: Appendices

### Appendix A: Banked Biosample Summary, 10-10-2014

<b>Metric</b>	<b>Follow-up #</b>	<b>MUSC</b>	<b>UVA</b>	<b>WUSTL</b>	<b>TOTAL</b>
# Subj -- frozen cancer tissue collected		178	222	201	601
# Subj -- biofluid only		31	35	69	135
# Subj -- without cancer, withdrawn from follow-up		8	31	18	57
# Subj -- total withdrawals		28	64	30	122
# Aliq -- frozen tumor in bank		591	810	540	1941
# Aliq -- frozen lung in bank		611	914	583	2108
# Aliq -- frozen bronchus in bank		249	287	137	673
# FFPE -- with tumor after QC		148	211	150	509
# FFPE -- non neopl lung		155	246	226	627
# FFPE -- non neopl bronchus		112	178	85	375
# Aliq -- serum (presurg) in bank		1344	2197	2414	5955
# Aliq -- plasma (presurg) in bank		1215	1849	2048	5112
# Aliq -- urine (presurg) in bank		1619	2217	2266	6102
# Aliq -- saliva (presurg) in bank		506	720	819	2045
# Aliq -- BAL fluid (presurg) in bank		804	1072	1635	3511
# Aliq -- serum (postsurg) in bank	1	604	1034	583	2221
# Aliq -- serum (postsurg) in bank	2	271	584	301	1156
# Aliq -- serum (postsurg) in bank	3	146	400	223	769
# Aliq -- serum (postsurg) in bank	4	53	198	125	376

<b>Metric</b>	<b>Follow-up #</b>	<b>MUSC</b>	<b>UVA</b>	<b>WUSTL</b>	<b>TOTAL</b>
# Aliq -- serum (postsurg) in bank	5	18	15	39	72
# Aliq -- serum (postsurg) in bank	6	5	0	24	29
# Aliq -- serum (postsurg) in bank	7	0	9	7	16
# Aliq -- plasma (postsurg) in bank	1	497	916	514	1927
# Aliq -- plasma (postsurg) in bank	2	236	518	256	1010
# Aliq -- plasma (postsurg) in bank	3	139	332	189	660
# Aliq -- plasma (postsurg) in bank	4	49	162	102	313
# Aliq -- plasma (postsurg) in bank	5	15	13	30	58
# Aliq -- plasma (postsurg) in bank	6	9	0	20	29
# Aliq -- plasma (postsurg) in bank	7	0	7	6	13
# Aliq -- urine (postsurg) in bank	1	713	1269	547	2529
# Aliq -- urine (postsurg) in bank	2	385	698	240	1323
# Aliq -- urine (postsurg) in bank	3	231	528	125	884
# Aliq -- urine (postsurg) in bank	4	78	240	110	428
# Aliq -- urine (postsurg) in bank	5	16	16	40	72
# Aliq -- urine (postsurg) in bank	6	16	0	32	48
# Aliq -- urine (postsurg) in bank	7	0	8	0	8
# Aliq -- saliva (postsurg) in bank	1	301	549	388	1238
# Aliq -- saliva (postsurg) in bank	2	0	9	8	17
# Aliq -- saliva (postsurg) in bank	3	0	4	0	4

## Appendix B: Frozen Tissue Donor Detail Report, 10/15/2014

Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
S0001	Adenocarcinoma	Stage IIB	Y	N	0.38	70	50	15	2	3	0.210	2		0.035	2	No - Quit Smoking	10	None	None	None
S0002	Adenocarcinoma	Stage IIA	Y	N	0.32	70	40	0	2	3	0.570	2		0.300	2	Never Smoked		None	None	None
S0003	Adenocarcinoma	Stage IB	Y	N	0.027	100	60	0	2		0.084	2		0.300	2	No - Quit Smoking	38	AR	Second-hand smoke	Second-hand smoke
S0004	Squamous Cell Carcinoma	Stage IIB	Y	N	1.942	20	80	5	10	7	4.903	10	8	0.300	3	No - Quit Smoking	75	AR	Asbestos, Coal mining, Second-hand smoke	Asbestos, Coal mining, Second-hand smoke
S0004	Squamous Cell Carcinoma	Stage IIB	Y	N	1.942	100	75	5	10	7	4.903	10	8	0.300	3	No - Quit Smoking	75	AR	Asbestos, Coal mining, Second-hand smoke	Asbestos, Coal mining, Second-hand smoke
S0006	Adenocarcinoma	Stage IB	Y	N	0.38	80	40	0	2	3	0.310	2	4			No - Quit Smoking	37	None	None	None
S0007	Squamous Cell Carcinoma	Stage IB	Y	N	0.43	60	50	0	2	2	0.700	3	4	0.530	3	No - Quit Smoking	30	None	None	None
S0008	Adenocarcinoma	Stage IIB	Y	N	0.57	50	50	5	2	3	0.260	1	4	0.070	2	No - Quit Smoking	72	None	None	None
S0010	Adenocarcinoma	Stage IB	Y	N	0.18	40	70	0	1		0.210	1	3	0.170	2	Never Smoked		None	None	None
S0011	Adenocarcinoma	Stage	Y	N	0.86	80	50	0	4	3	0.120	1	4	0.170	2	No - Quit Smoking	45	AR	Second-hand smoke	Second-hand smoke
S0012	Adenocarcinoma	Stage IB	Y	N	1.8	50	40	10	3	3	0.120	2		0.120	2	Yes - Current Smoker	120	None	None	None
S0013	Adenocarcinoma	Stage IA	Y	N	0.108	50	70	0	1		0.532	2	3	0.392	1	Yes - Current Smoker		None	None	None
S0014	Adenocarcinoma	Stage IIB	Y	N	1.56	80	70	20	4	2	0.700	3		0.190	2	Yes - Current Smoker		None	None	None
S0015	Adenocarcinoma	Stage IA	Y	N	0.05	100	70	0	2		0.670	2		0.080	2	No - Quit Smoking	45	None	None	None
S0016	Squamous Cell Carcinoma	Stage IA	N	N							0.673	2		0.105	2	Yes - Current Smoker	58	None	None	None

Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
S0017	Squamous Cell Carcinoma	Stage IA	Y	N	0.519	60	70	5	2	2	1.620	2		0.250	2	Yes - Current Smoker		AF	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
S0018	Squamous Cell Carcinoma	Stage IA	Y	N	0.056	97	80	0	2		0.140	1	3	0.038	2	No - Quit Smoking	58	AF	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
S0019	Adenocarcinoma	Stage IA	Y	N	0.054	100	70	0	1		0.058	2	3	0.023	2	Never Smoked		None	None	None
S0022	Squamous Cell Carcinoma	Stage IA	Y	N	0.499	60	60	15	3	3	0.718	3		0.196	2	No - Quit Smoking	62	AR	Second-hand smoke	Second-hand smoke
S0023	Adenocarcinoma	Stage IA	Y	N	0.022	10	70	0	2		0.320	2	3	0.180	2	No - Quit Smoking		None	None	None
S0024	Adenocarcinoma	Stage IB	Y	N	0.138	100	60	0	2	2	0.087	2				Yes - Current Smoker	52	MR	None	None
S0025	Squamous Cell Carcinoma	Stage IIA	Y	Y	0.049						0.083	2		0.022	2	No - Quit Smoking	50	AR	Second-hand smoke	Second-hand smoke
S0026	Bronchioalveolar Carcinoma	Stage IB	Y	N	0.215	100	50	0	2	3	0.115	1	4	0.103	2	No - Quit Smoking		None	None	None
S0027	Adenocarcinoma	Stage IA	Y	N	0.02	50	10	0	2			2	3			No - Quit Smoking	105	AR	Second-hand smoke	Second-hand smoke
S0028	Squamous Cell Carcinoma	Stage IIIB	N	N												No - Quit Smoking	150	AF	Jet fuel, Nuclear weapons, Second-hand	Jet fuel, Nuclear weapons, Second-hand
S0029	Squamous Cell Carcinoma	Stage IIA	Y	N	0.06	100	40	0	1	3	.571	1	8	.043	1	No - Quit Smoking		AR	Second-hand smoke	Second-hand smoke
S0030	Adenocarcinoma	Stage IA	Y	N	0.034	1	1	0	1		.488	2	3	.583	3	No - Quit Smoking	66	None	None	None
S0031	Adenocarcinoma	Stage IIA	Y	N	0.044	30	4	0	1		.062	1				No - Quit Smoking	32	None	None	None
S0032	Adenocarcinoma	Stage IA	Y	N	0.066	30	20	0	1		1.50	3	3	.047	1	No - Quit Smoking	15	None	None	None
S0033	Squamous Cell Carcinoma	Stage IA	Y	N	0.318	50	80	0	2		.902	5	6	.086	1	No - Quit Smoking		None	None	None
S0035	Adenocarcinoma	Stage IA	Y	Y	1.5	40	70	0	2		1.30	3	3	.31	1	No - Quit Smoking	33	None	None	None



Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
S0036	Squamous Cell Carcinoma	Stage IB	Y	N	0.016	55	40	0	1		.07	1				No - Quit Smoking	60	AF	Second-hand smoke	Second-hand smoke
S0037	Squamous Cell Carcinoma	Stage	Y	N	1.2	100	70	50	2		.802	3	3	.07	1	No - Quit Smoking		None	None	None
S0038	Adenocarcinoma	Stage IB	Y	N	0.877	95	70	10	3	8	2.79	3	4	.277	2	No - Quit Smoking	110	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
S0039	Small Cell Carcinoma	Stage IA	Y	N	0.288	100	80	15	2	10	.417	2	4	.098	1	No - Quit Smoking	53	None	None	None
S0040	Squamous Cell Carcinoma	Stage IA	Y	N	0.217	90	80	5	1	3	.725	2	3	.115	2	No - Quit Smoking	35	MR	Second-hand smoke	Second-hand smoke
S0041	Squamous Cell Carcinoma	Stage	Y	N	0.443	90	60	10	3	4	.797	3	4	.311	2	Yes - Current Smoker	45	None	None	None
S0042	Adenocarcinoma	Stage IB	Y	N	0.99	80	70	5	3	3	2.39	4		.15	1	No - Quit Smoking	45	None	None	None
S0043	Adenocarcinoma	Stage IIA	Y	N	0.181	80	70	0	1	21	.22	1	12			Yes - Current Smoker	40	None	None	None
S0045	Adenocarcinoma	Stage	Y	N	0.15	25	80	0	1		.162	1		.11	1	No - Quit Smoking	30	None	None	None
S0046	Adenocarcinoma	Stage IB	Y	N	0.182	100	100	80	1	4	1.26	1	4	.20	1	Yes - Current Smoker	25	None	None	None
S0047	Squamous Cell Carcinoma	Stage IA	Y	N	0.26				1		.078	1		.115	1	No - Quit Smoking	15	None	None	None
S0050	Squamous Cell Carcinoma	Stage IIB	Y	N	0.58	60	80	10	3	4	.09		4	.182	2	Yes - Current Smoker	75	None	None	None
S0051	Adenocarcinoma	Stage IA	Y	N	0.063	55	80	0		8	.545	1	8	.398	2	No - Quit Smoking	42	None	None	None
S0052	Squamous Cell Carcinoma	Stage IA	Y	N	0.085	100	90	0	1		.107	1				Yes - Current Smoker		None	None	None
S0053	Adenocarcinoma	Stage IA	Y	N	0.068	40	10	50	1		.495	1		.333	2	No - Quit Smoking	45	None	None	None

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S0054	Carcinoid Tumor: Typical	Stage IB	Y	N	0.143	100	99	0	1	4	.128	1	4	.23	1	No - Quit Smoking	10	None	None	None
S0055	Adenocarcinoma: Mucinous Features	Stage IIB	Y	N	0.39	90	60	0	4	8	.398	5	8	.360	2	No - Quit Smoking	20	AF	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
S0056	Squamous Cell Carcinoma	Stage	Y	N	0.436	90	80	15	2	2	.312	2	3	.118	1	No - Quit Smoking	23	None	None	None
S0057	Adenocarcinoma: BAC features	Stage IA	N	N						4	.321	2	4	.16	1	Yes - Current Smoker	19	None	None	None
S0058	Adenocarcinoma	Stage	Y	N	0.5	30	60	10		4	.543	2	4	.366	2	Yes - Current Smoker	4	None	None	None
S0061	Adenocarcinoma: BAC features	Stage IIA	N	N						4	.234	1	4	.088	1	No - Quit Smoking	15	None	None	None
S0062	Adenocarcinoma: BAC features	Stage IA	Y	N	0.354	85	75	0	2	8	.145		4	.14	1	No - Quit Smoking	30	None	None	None
S0063	Small Cell Carcinoma	Stage IA	Y	N		100	90	5	2	5		2	4			No - Quit Smoking	60	None	None	None
S0066	Undifferentiated Carcinoma: Large Cell	Stage IA	Y	N	0.01				1		.01	1				No - Quit Smoking	49	None	None	None
S0067	Undifferentiated Carcinoma: Large Cell	Stage	Y	N	0.254	90	90	70	1	8	.354	1	8	.105	1	No - Quit Smoking	20	None	None	None
S0068	Adenocarcinoma	Stage IB	Y	N	0.065	90	70	5		8	.643	2	8	.133	1	No - Quit Smoking	165	AR	Second-hand smoke	Second-hand smoke
S0070	Squamous Cell Carcinoma	Stage IIB	Y	N	2.161	100	40	10	2	8	1.098	4	8	.581	2	No - Quit Smoking	55	None	Second-hand smoke	Second-hand smoke
S0071	Adenocarcinoma	Stage IA	Y	N	0.138	100	70	0	1	4	.231	1	4	.089	1	No - Quit Smoking	30	None	None	None
S0072	Squamous Cell Carcinoma	Stage	Y	N	0.046	100	70	0	1	16	.188	3	16	.075	1	No - Quit Smoking	19	None	None	None
S0073	Squamous Cell Carcinoma	Stage IIA	Y	N	0.1	100	50	5	1	16	.166	4	16	.206	1	Yes - Current Smoker	64	None	None	None

Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
S0074	Adenocarcinoma	Stage IA	Y	N	0.201	100	40	0		8	.298	2	8	.22	1	No - Quit Smoking	60	None	None	None
S0077	Squamous Cell Carcinoma	Stage IB	Y	N	0.136	100	80	5	1	8	.189	1	8	.302	2	No - Quit Smoking	40	None	None	None
S0078	Adenocarcinoma	Stage	Y	N	0.611	100	70	0	3	8	.990	3	8	.12	1	No - Quit Smoking	20	None	None	None
S0080	Adenocarcinoma	Stage IA	Y	N	0.074	70	50	10	1		.21	1		.078	1	Never Smoked		None	None	None
S0082	Adenocarcinoma: BAC features	Stage IB	Y	N	0.297	100	70	0	1	8	.198	1	8	.08	1	No - Quit Smoking	12	None	None	None
S0083	Adenocarcinoma: BAC features	Stage IA	Y	N	0.185	100	70	0	2	8	.126	1	8	.087	1	No - Quit Smoking	80	NV	Second-hand smoke	Second-hand smoke
S0084	Adenocarcinoma	Stage IA	Y	Y	0.175	100	0	100	1		.257	2		.074	1	Yes - Current Smoker	32	None	None	None
S0085	Adenocarcinoma: BAC features	Stage IA	Y	N	0.282	90	70	0	2	8	.783	2	8	.129	1	Yes - Current Smoker	40	None	None	None
S0088	Undifferentiated Carcinoma: Large Cell	Stage IB	Y	N	0.895	100	50	5	4	8	.512	4	8	.285	2	Yes - Current Smoker		None	None	None
S0090	Squamous Cell Carcinoma	Stage IB	Y	N	1.308	100	50	20	3	8	.450	4	8	.155	2	No - Quit Smoking	21	AR	Second-hand smoke	Second-hand smoke
S0091	Squamous Cell Carcinoma	Stage IIB	Y	N	0.149	100	70	0		12	.132		8	.092	1	No - Quit Smoking	50	AR	Agent Orange, Nuclear weapons, Second-hand	Agent Orange, Nuclear weapons, Second-hand
S0092	Squamous Cell Carcinoma	Stage IIB	Y	N	0.2	40	20	0	1		.410	3		.008	2	No - Quit Smoking	30	None	None	None
S0093	Adenocarcinoma	Stage IIB	Y	N	0.82	90	60	10	5	4	.319	2	4	.135	1	Yes - Current Smoker	8	None	None	None
S0094	Adenocarcinoma	Stage IB	Y	N	0.306	100	60	0	1	8	.210	1	8	.07	1	Yes - Current Smoker	55	None	None	None
S0095	Adenocarcinoma	Stage	Y	N	2.615	100	40	10	4		4.309	4		.884	7	No - Quit Smoking	34	None	None	None

Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
S0098	Undifferentiated Carcinoma: Large Cell	Stage IA	Y	N		100	80	5	2	8		2	9		1	No - Quit Smoking	50	AR	Agent Orange, Nuclear weapons, Second-hand	Agent Orange, Nuclear weapons, Second-hand
S0099	Carcinoid Tumor: Typical	Stage	Y	N	0.02	85	100	0		8	.03		8	.03	1	Never Smoked		None	None	None
S0100	Squamous Cell Carcinoma	Stage IB	Y	N	0.048	50	30	10	1		.087	1				Never Smoked		None	None	None
S0105	Adenosquamous Carcinoma	Stage	Y	N	0.637	100	80	15	3	8	.739	3	8	.09	1	No - Quit Smoking	71	None	None	None
S0107	Adenocarcinoma: BAC features	Stage IIB	Y	N	4.747	80	60	0	15	4	6.678	15	4			Yes - Current Smoker	40	None	None	None
S0108	Squamous Cell Carcinoma	Stage	Y	N	11.59	40	40	15	10	4	12.20	10	4	.25	1	No - Quit Smoking	63	None	None	None
S0109	Adenocarcinoma	Stage	Y	N	0.659	90	30	0	3	4	1.750	3	4	.21	1	No - Quit Smoking	2	None	None	None
S0110	Adenocarcinoma		Y	N	0.485	75	70	0	2	4	.494	2	4			Yes - Current Smoker	60	None	None	None
S0112	Squamous Cell Carcinoma	Stage IIA	Y	N	3.465	80	70	30	5	4	2.172	7	4	.411	2			None		
S0115	Adenocarcinoma: BAC features	Stage IA	Y	N	0.35	95	70	0	2	4	.870	2	4	.131	1	No - Quit Smoking	20	None	None	None
S0117	Small Cell Carcinoma	Stage IA	Y	N	0.093	95	80	10	1	12	1.916	5	9	.250	2	Yes - Current Smoker	50	None	None	None
S0119	Adenocarcinoma	Stage IV	Y	N	0.33	90	60	0	2	4	.356	2	4	.322	1	No - Quit Smoking	12	None	None	None
S0121	Adenocarcinoma	Stage IIB	Y	N	2.043	90	80	10	15	8	1.407	7	4	.477	1	No - Quit Smoking	20	None	None	None
S0122	Small Cell Carcinoma	Stage IA	Y	N	0.181	40	90	0	1		.134	1		.138	1	No - Quit Smoking	8	None	None	None
S0124	Adenocarcinoma	Stage IB	Y	N	1.099	100	90	5	6	4	0.732	4	4	0.334	2	Yes - Current Smoker	80	None	None	None
S0125	Adenocarcinoma	Stage IA	Y	N	0.08	100	90	0	1		.10	1		.175	1	Yes - Current Smoker	27	None	None	None

Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
S0126	Adenocarcinoma	Stage IIA	Y	N	1.462	85	90	0	5	4	0.521	3	4	0.226	1	Yes - Current Smoker	8	None	None	None
S0127	Squamous Cell Carcinoma	Stage IA	Y	N	0.151	90	85	0	1		1.25	1		.33	1	No - Quit Smoking	38	None	Second-hand smoke	Second-hand smoke
S0128	Adenocarcinoma	Stage	Y	N	0.307	100	70	0	1	4	4.708	5	4			No - Quit Smoking	94	NV	Second-hand smoke	Second-hand smoke
S0129	Squamous Cell Carcinoma		Y	N	4.618	100	98	10	15	4	1.777	6	4	1.010	4	No - Quit Smoking	28	NV	Second-hand smoke	Second-hand smoke
S0130	Squamous Cell Carcinoma	Stage IB	Y	N	2.278	100	50	10	8	4	1.734	8	4	.483	2	Yes - Current Smoker	6	None	None	None
S0131	Adenocarcinoma	Stage IV	Y	N	0.21	70	60	0	1		.38	1		.13	1	No - Quit Smoking	48	None	None	None
S0134	Adenocarcinoma	Stage IA	Y	N	0.246	40	30	0	1		.27	1		.16	1	Never Smoked		None	None	None
S0135	Squamous Cell Carcinoma	Stage IIA	Y	N	0.302	90	80	0	1	4	1.936	1	4	.35	1	Yes - Current Smoker	22	None	None	None
S0136	Adenocarcinoma: Mucinous Features	Stage IA	Y	N	0.334	95	90	0	1		0.305	1		.035	1	No - Quit Smoking	40	None	None	None
S0137	Squamous Cell Carcinoma	Stage IB	Y	N	0.21	95	70	5	1		0.157	1		.21	1	Yes - Current Smoker	80	None	None	None
S0138	Adenocarcinoma	Stage IB	Y	N	1.054	100	80	15	6	4						Yes - Current Smoker	13	None	None	None
S0142	Adenocarcinoma: BAC features	Stage IA	Y	N	0.12	75	50	0	1		.43	1		.20	1	No - Quit Smoking	29	None	None	None
S0143	Squamous Cell Carcinoma	Stage	Y	N	1.86	85	80	0	4	4	1.340	4	4	0.349	2	Yes - Current Smoker	16	None	None	None
S0144	Squamous Cell Carcinoma	Stage IB	Y	N	0.64	100	75	10	3	4	0.581	3	4			Yes - Current Smoker	25	None	None	None
S0145	Carcinoid Tumor: Typical	Stage IA	Y	N	0.01	100	100	0	1		0.105	1				No - Quit Smoking	20	None	None	None

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S0146	Adenocarcinoma	Stage	Y	N	0.587	100	75	5	2	4	2.696	3	4	.21	1	Yes - Current Smoker	16	None		
S0148	Adenocarcinoma	Stage IA	Y	Y	0.03	25	30	0	1		0.065	1		0.039	1	Never Smoked		None	None	None
S0150	Adenocarcinoma	Stage IA	Y	N	0.12	10	70	0	1		.045	1				No - Quit Smoking	14	None	None	None
S0153	Adenocarcinoma	Stage IIA	Y	N	0.561	100	70	0	3	4	0.604	3	4	.13	1	No - Quit Smoking	0	None	None	None
S0154	Adenocarcinoma	Stage IA	Y	N	0.14	45	95	0	1		.10	1				No - Quit Smoking	8	None	None	None
S0155	Carcinoid Tumor: Typical	Stage IA	Y	N	0.274	85	95	0	1	4	0.389	1	4	0.259	2	No - Quit Smoking	1	None	None	None
S0156	Squamous Cell Carcinoma	Stage IIB	Y	N	1.296	85	90	0	3	4	1.189	3	4	1.170	4	No - Quit Smoking	30	None	Agent Orange, Asbestos, Second-hand smoke	Agent Orange, Asbestos, Second-hand smoke
S0159	Squamous Cell Carcinoma	Stage IIB	Y	N	0.383	100	60	20	2	4	0.830	2	4	0.299	2	Yes - Current Smoker	40	None	None	None
S0160	Squamous Cell Carcinoma	Stage IIA	Y	N	1.974	80	25	0	5	4	0.758	5	4	0.680	2	Yes - Current Smoker	48	NV	None	None
S0167	Carcinoid Tumor: Atypical	Stage IIB	Y	N	0.759	90	95	0	2	4						Never Smoked		None	None	None
S0168	Squamous Cell Carcinoma	Stage IB	Y	N	6.561	90	40	0	13	4	2.411	13	4	0.557	2	Yes - Current Smoker	47	None	None	None
S0170	Squamous Cell Carcinoma	Stage IA	Y	N	0.019	100	30	0	1		.086	1				No - Quit Smoking	84	NV	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered
S0172	Adenocarcinoma	Stage IA	Y	N	0.11	100	95	0	1		1.424	3		.12	1	No - Quit Smoking	7	None	None	None
S0173	Carcinoid Tumor: Atypical	Stage IIA	Y	N	0.349	100	90	0	1	4	0.258	1	4	.15	1	Yes - Current Smoker	45	None	None	None
S0174	Squamous Cell Carcinoma	Stage IA	Y	N	1.705	95	85	20	7	4	3.408	10	4	.13	1	No - Quit Smoking	40	None	None	None

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S0175	Adenocarcinoma	Stage IB	Y	N	0.463	66	95	0	1	4	1.819	2	4	.36	1	No - Quit Smoking	23	AF	Agent Orange, Jet fuel, Second-hand smoke	Agent Orange, Jet fuel, Second-hand smoke
S0176	Adenocarcinoma	Stage	Y	N	1.993	95	80	0	10	4	1.110	7	4	0.711	2	No - Quit Smoking	17	MB	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
S0177	Squamous Cell Carcinoma	Stage IA	Y	N	0.84	40	40	10	3	4	2.446	3	4	0.425	2	No - Quit Smoking	90	AR	Second-hand smoke	Second-hand smoke
S0178	Squamous Cell Carcinoma	Stage IIA	Y	N	1.506	100	90	25	7	4	1.971	7	4	1.196	4	No - Quit Smoking	50	None	None	None
S0179	Adenocarcinoma	Stage IB	Y	N	1.041	60	50	0	2	4	2.010	2	4	1.044	3	No - Quit Smoking	66	AR	Second-hand smoke	Second-hand smoke
S0180	Squamous Cell Carcinoma	Stage IA	Y	N	2.464	95	90	20	7	4	3.152	7	4	0.626	2	No - Quit Smoking	30	None	None	None
S0181	Carcinoid Tumor: Typical	Stage IA	Y	N	0.217	95	95	0	1	4	0.699	1	4	0.126	1	No - Quit Smoking	0	None	None	None
S0182	Undifferentiated Carcinoma: Large Cell	Stage IIA	Y	N	0.446	100	90	0	3	4	1.256	2	4	0.722	3	Yes - Current Smoker	49	None	None	None
S0184	Solitary Fibrous Tumor	Stage IIA	Y	N	8.033	55	90	25	9	4	4.464	9	4	0.669	3	No - Quit Smoking	68	MR	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
s0185	Adenocarcinoma: BAC features	Stage IIB	Y	N	4.353	10	50	0	1		3.783	1		0.680	1	Never Smoked		None	None	None
S0186	Adenocarcinoma	Stage IB	Y	N	0.478	70	50	5	1		0.444	1				No - Quit Smoking	40	None	None	None
S0187	Carcinoid Tumor: Typical	Stage IB	Y	N	2.346	100	98	0	1		2.025	1		0.339	1	No - Quit Smoking	50	None	None	None
S0188	Squamous Cell Carcinoma	Stage IIA	Y	N	2.936	90	60	5	1		4.890	1		0.509	1	No - Quit Smoking	45	None	None	None
S0190	Squamous Cell Carcinoma	Stage IB	Y	N	1.3	90	85	5	1		11.166	1		0.467	1	No - Quit Smoking	3	None	None	None
S0191	Adenocarcinoma	Stage	Y	N	0.96	60	70	0	1		0.525	1		1.218	1	No - Quit Smoking	1	AR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
S0192	Carcinoid Tumor: Atypical	Stage IB	Y	N	2.577	97	95	0	1		1.248	1		0.360		No - Quit Smoking	35	None	None	None

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V0001	Squamous Cell Carcinoma	Stage IB	Y	N	0.59	100	60	20	2	7	0.890	2	4	0.760	2	Yes - Current Smoker	75	None	None	None
V0002	Adenocarcinoma	Stage IIA	Y	N	0.53	100	70	2	4	8	0.400	3	4	0.370	2	No - Quit Smoking	70	AF	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
V0004	Adenocarcinoma	Stage	Y	N	0.47	20	70	0	1	3	1.570	1		0.310	2	Never Smoked		AR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0006	Neuroendocrine Carcinoma: Large Cell	Stage IB	Y	N	2.56	100	80	25	6	7	0.670	4	4	0.370	1	No - Quit Smoking	30	NV	Agent Orange, Asbestos, Nuclear weapons.	Agent Orange, Asbestos, Nuclear weapons.
V0007	Adenocarcinoma	Stage IV	Y	Y	0.22	100	80	0		7	0.200	2	4			No - Quit Smoking	60	None	None	None
V0009	Bronchioalveolar Carcinoma	Stage IA	Y	N	1.35	70	50	0	5	8	0.800	3	4	0.430	2	Never Smoked		AF	Agent Orange, Jet fuel, Second-hand	Agent Orange, Jet fuel, Second-hand
V0010	Squamous Cell Carcinoma	Stage IIA	Y	N	0.64	95	70	5	3	8	1.060	4	4	0.230	2	Yes - Current Smoker	60	None	None	None
V0011	Squamous Cell Carcinoma	Stage IB	Y	N	0.49	60	40	20		7	0.200	1	4			No - Quit Smoking	35	None	None	None
V0012	Squamous Cell Carcinoma	Stage IB	Y	N	0.79	20	40	40		8	0.520	1	4	0.740	2	No - Quit Smoking	80	AR	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
V0013	Adenosquamous Carcinoma	Stage	Y	Y	0.64	70	75	5	2	7	0.680	3	4	0.220	2	Yes - Current Smoker	66	None	None	None
V0014	Squamous Cell Carcinoma		Y	N	0.43	100	80	15	2	6	0.670	2	4			Yes - Current Smoker	60	None	None	None
V0015	Adenocarcinoma	Stage IA	Y	N	0.24	60	70	0	2	6	0.220	1	4	0.260	3	No - Quit Smoking	40	AR	Agent Orange, Second-hand smoke	Agent Orange, Second-hand smoke
V0017	Adenocarcinoma	Stage IB	Y	N	0.88	50	70	5	2	6	0.390	2	4	0.270	2	Never Smoked		AR	Burn pits, Nuclear weapons, Nuclear-powered	Burn pits, Nuclear weapons, Nuclear-powered
V0020	Squamous Cell Carcinoma	Stage	Y	N	0.74	70	80	5	5	3	2.350	5		0.190	3	No - Quit Smoking	30	None	None	None
V0021	Squamous Cell Carcinoma	Stage IA	Y	N	0.14	40	70	5	1	3	0.420	2		0.180	2	Yes - Current Smoker	102	None	None	None



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V0022	Adenosquamous Carcinoma	Stage IA	N	N												No - Quit Smoking		None	None	None
V0023	Adenocarcinoma	Stage IB	Y	N	0.44	60	60	0	1	3	0.138	1	4	0.139	2	No - Quit Smoking	45	None	None	None
V0024	Adenocarcinoma	Stage IIB	Y	N	0.76	100	90	50	1	3	0.740	2		0.200	2	Yes - Current Smoker	114	None	None	None
V0025	Adenocarcinoma	Stage IA	Y	N	0.357	60	60	5	3	3	1.480	3	4	0.150	3	No - Quit Smoking	66	AR	Agent Orange, Second-hand smoke	Agent Orange, Second-hand smoke
V0026	Adenocarcinoma	Stage IA	Y	N	0.22	85	60	0	1	3	0.730	2	4	0.670	2	No - Quit Smoking	98	NV	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered
V0027	Adenocarcinoma	Stage IIA	Y	N	0.75	70	80	2	3	3	0.630	2	4	0.160	2	No - Quit Smoking	52	None	None	None
V0029	Squamous Cell Carcinoma	Stage IIB	Y	N	0.6	90	70	0	4	3	0.330	3				No - Quit Smoking	10	None	None	None
V0031	Squamous Cell Carcinoma	Stage IIA	Y	N	0.82	85	80	40	3	2	1.120	2	4	0.117	2	No - Quit Smoking	40	None	None	None
V0035	Squamous Cell Carcinoma	Stage IIB	Y	N	0.77	30	60	50	2	3	0.710	3		0.530	1	No - Quit Smoking	30	None	None	None
V0037	Adenocarcinoma	Stage	Y	Y	0.32				2		0.464	2		0.330	2	No - Quit Smoking		None	None	None
V0039	Adenocarcinoma	Stage	Y	N	0.61	70	70	10	4	3	0.690	5		0.480	3	No - Quit Smoking	60	AR	None	None
V0040	Squamous Cell Carcinoma	Stage IA	Y	N	0.17						1.010	2		0.145	2	Yes - Current Smoker		None	None	None
V0041	Adenocarcinoma	Stage IIB	Y	N	0.4	60	50	0	2	3	0.570	2		0.075	2	Yes - Current Smoker		None	None	None
V0042	Adenocarcinoma	Stage IA	Y	N	0.3	85	70	0	1	3	0.250	2	4	0.081	2	No - Quit Smoking	112	None	None	None
V0043	Adenocarcinoma	Stage IA	Y	N	0.2	30	40	0	1		1.370	2	6			No - Quit Smoking	76	None	None	None

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V0044	Adenocarcinoma	Stage	Y	Y	0.6	30	40	0	1	4	0.330	2		0.128	2	No - Quit Smoking		None	None	None
V0045	Adenocarcinoma	Stage	Y	N	0.21	25	20	0	1		2.800	5	3	0.450	3	Yes - Current Smoker		None	None	None
V0050	Carcinoid Tumor: Typical	Stage IA	Y	N	0.15	90	99	0	2	3	0.420	4		0.150	1	No - Quit Smoking		AR	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0055	Squamous Cell Carcinoma	Stage IB	Y	N	0.86	100	75	5	3	3	1.12	3	4	.466	1	No - Quit Smoking	111	AR	Asbestos, Nuclear weapons, Second-hand	Asbestos, Nuclear weapons, Second-hand
V0056	Squamous Cell Carcinoma	Stage IIA	Y	N	0.67	90	80	10	6	3	1.81	6	4	.072	1	No - Quit Smoking	100	None	None	None
V0057	Adenocarcinoma	Stage IA	Y	N	0.46	40	70	5	1	3	1.19	3		.316	1	No - Quit Smoking		AF	Agent Orange, Depleted Uranium, Jet fuel, Nuclear weapons, Second-hand	Agent Orange, Depleted Uranium, Jet fuel, Nuclear weapons, Second-hand
V0058	Squamous Cell Carcinoma	Stage IB	Y	N	0.79	40	60	15	3	3	.59	4		.33	1	Yes - Current Smoker	22	None	None	None
V0059	Squamous Cell Carcinoma		Y	N	0.28	70	15	0	1		.28	3	3			No - Quit Smoking	20	None	None	None
V0061	Squamous Cell Carcinoma	Stage IA	Y	N	0.54	40	30	10	2	3	0.97	4		0.29	3	No - Quit Smoking	45	None	None	None
V0064	Squamous Cell Carcinoma	Stage IB	Y	N	0.68	30	80	5	2	3	0.57	3		.08	1	Yes - Current Smoker	35	AR	Burn pits, Second-hand smoke	Burn pits, Second-hand smoke
V0065	Adenocarcinoma	Stage IB	Y	N	0.61	60	20	0	3	3	0.82	3	4	.053	1	No - Quit Smoking	40	None	None	None
V0066	Adenocarcinoma	Stage IIA	Y	N	0.66	100	40	0	4	3	1.09	4	4	0.23	1	No - Quit Smoking		NV	Asbestos	Asbestos
V0069	Carcinoid Tumor: Atypical	Stage IB	Y	N	0.18	80	80	0	4	6	.98	2		.06		Never Smoked		None	None	None
V0070	Squamous Cell Carcinoma	Stage IB	Y	N	0.71	100	70	40	4	3	0.92	4		0.39		Yes - Current Smoker		None	None	None
V0071	Adenocarcinoma	Stage IV	Y	N	0.81	70	70	5	2	3	1.08	2		.15	1	No - Quit Smoking	75	None	None	None

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V0072	Adenocarcinoma	Stage	Y	N	0.88	90	80	0	7	3	.90	7		.19	2	Yes - Current Smoker	62	None	None	None
V0072	Adenocarcinoma	Stage	Y	N	0.88	90	80	0	7	3	.90	7		.19	2	Yes - Current Smoker	62	None	None	None
V0076	Bronchioalveolar Carcinoma	Stage IA	Y	N	1.66	30	80	0	4	3	2.29	4		.85	6	No - Quit Smoking		None	None	None
V0077	Squamous Cell Carcinoma	Stage IIB	Y	N	1.24	60	50	30	3	4	1.55	3	3	.59	2	No - Quit Smoking	100	None	None	None
V0078	Adenoid Cystic Carcinoma	Stage IIB	Y	N	0.8	80	95	0	3	5	.26	2	4	.08	1	No - Quit Smoking	4	None	None	None
V0079	Adenocarcinoma	Stage	Y	N	0.63	50	40	0	3	8	1.69	4	8	.54	2	Never Smoked		None	None	None
V0080	Adenocarcinoma	Stage IIA	Y	N	0.88	90	90	40	3	8	1.17	3	4	.54	2	Yes - Current Smoker		None	None	None
V0081	Carcinoid Tumor: Typical	Stage IIA	Y	N	0.09	90	80	0	1	4	.64	1	4	.18	1	No - Quit Smoking	54	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0083	Squamous Cell Carcinoma	Stage IA	Y	N	0.5	25	70	5		3	.39	1	3			No - Quit Smoking		None	None	None
V0088	Squamous Cell Carcinoma	Stage IIB	Y	N	1.16	90	70	20	4	3	1.88	4	3	.27	2	No - Quit Smoking	50	MR	Depleted Uranium, Nuclear weanons.	Depleted Uranium, Nuclear weanons.
V0089	Adenocarcinoma	Stage IIB	Y	N	0.8	90	50	30	3	4	.30	3	4			No - Quit Smoking	43	None	None	None
V0090	Adenocarcinoma	Stage IB	Y	N	1.12	50	70	0	2	4	.73	3	4	.79	2	No - Quit Smoking	60	None	None	None
V0091	Adenocarcinoma	Stage	Y	N	0.57	30	15	0	1		.85	3	8	.19	2	Never Smoked		None	None	None
V0093	Squamous Cell Carcinoma	Stage IA	Y	N	1.6	90	90	10	5	4	1.40	5	4	.136	1	Yes - Current Smoker	45	None	None	None
V0094	Bronchioalveolar Carcinoma	Stage IIB	Y	N	0.17	75	80	0	1	4	.21	1	4	.16	1	No - Quit Smoking	45	MR	Burn pits, Second-hand smoke	Burn pits, Second-hand smoke
V0095	Undifferentiated Carcinoma: Large Cell	Stage IA	Y	N	0.47	85	70	5	2	5	1.68	2	4	.11	1	No - Quit Smoking	50	None	Asbestos	Asbestos

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V0096	Squamous Cell Carcinoma	Stage IIA	Y	N	0.29	100	60	20	2	4	.89	3	4	.44	2	Yes - Current Smoker	88	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0097	Squamous Cell Carcinoma	Stage IB	Y	N	1.8	80	75	25	5	3	1.71	5	3	.38	2	No - Quit Smoking	60	None	None	None
V0098	Squamous Cell Carcinoma	Stage IB	Y	N	0.8	60	50	25	3	4	1.84	3	4	.17	1	Yes - Current Smoker	52	None	None	None
V0099	Carcinoid Tumor: Typical	Stage IA	Y	N	0.14	90	90	0	1	8	.85	4	9	.08	1	Yes - Current Smoker	69	None	None	None
V0100	Adenocarcinoma	Stage	Y	N	0.4	70	70	10	1	12	1.20	1	8	.46	1	Never Smoked		None	None	None
V0101	Squamous Cell Carcinoma	Stage IA	Y	N	0.57	50	50	0	1	4	.37	1	4			No - Quit Smoking	50	None	None	None
V0103	Adenosquamous Carcinoma	Stage IA	Y	N	0.07	50	80	25		4	.28	1	4			No - Quit Smoking	60	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0105	Adenocarcinoma	Stage IA	Y	N	0.27	100	80	0		8	.38		8	.30	2	Never Smoked		None	None	None
V0106	Adenocarcinoma	Stage IB	Y	N	0.76	20	60	0	1	8	.32	3	8			No - Quit Smoking	30	None	None	None
V0107	Carcinoid Tumor: Typical	Stage IB	Y	N	0.21	100	70	0	1	4	.81	1	4	.37	1	No - Quit Smoking	25	None	None	None
V0108	Adenosquamous Carcinoma	Stage	Y	N	1.27	100	80	0	6	8	.89	7	8	.058	1	No - Quit Smoking	2	None	None	None
V0110	Mucinous Cystic Neoplasm	Stage IA	Y	N	0.92	70	30	0	3	8	1.93	5	8			Never Smoked		None	None	None
V0111	Adenocarcinoma	Stage IB	Y	N	0.44	85	50	0	2	8	.47	4	8	.20	2	No - Quit Smoking	60	None	None	None
V0112	Adenocarcinoma	Stage IA	Y	Y	0.18	70	50	0	1	8	.58	4	8	.62	3	Yes - Current Smoker	4	None	None	None
V0113	Carcinoid Tumor: Typical	Stage IA	Y	N	0.24	50	85	0	2		.48	5	8			No - Quit Smoking	2	None	None	None
V0114	Squamous Cell Carcinoma	Stage	Y	N	1.39	90	70	15	5	8	.89	7	8	.30	1	No - Quit Smoking	40	None	None	None

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V0115	Adenosquamous Carcinoma	Stage IA	Y	N	0.56	90	85	0	3	8	.26	4	8			No - Quit Smoking	50	AR	Burn pits, Second-hand smoke	Burn pits, Second-hand smoke
V0116	Adenocarcinoma	Stage IIA	Y	N	0.85	60	60	5	3	8	1.58	4	8	.54	1	No - Quit Smoking	70	None	None	None
V0117	Carcinoid Tumor: Typical	Stage IB	Y	N	1.56	100	95	0	4	9	1.73	4	8	1.07	3	No - Quit Smoking	15	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0118	Squamous Cell Carcinoma	Stage	Y	N	3.86	100	40	5	8	8	3.85	8	8	.26	1	Yes - Current Smoker	104	None	None	None
V0119	Adenocarcinoma	Stage IIA	Y	N	1.01	80	70	0	6	8	1.09	7	8	.20	2	No - Quit Smoking	30	MR	Second-hand smoke, Toxic waste sites	Second-hand smoke, Toxic waste sites
V0120	Adenocarcinoma	Stage IV	Y	Y	1.27	50	80	50	3	8	.79	4	8	.41	2	Yes - Current Smoker	40	None	None	None
V0121	Adenocarcinoma	Stage IIA	Y	N	1.0	80	60	0	7	8	2.25	8	8	.27	1	No - Quit Smoking	80	AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0121	Adenocarcinoma	Stage IIA	Y	N	1.0	90	60	5	7	8	2.25	8	8	.27	1	No - Quit Smoking	80	AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0124	Adenocarcinoma	Stage	Y	N	1.19	90	60	5	4	8	1.39	3	8	.18	1	No - Quit Smoking	15	None	None	None
V0125	Adenocarcinoma	Stage IA	Y	N	0.15	60	50	0	2	8	1.11	4	8	.38	1	No - Quit Smoking	42	None	None	None
V0125	Adenocarcinoma: BAC features	Stage IA	Y	N	0.15	85	70	0	2	8	1.11	4	8	.38	1	No - Quit Smoking	42	None	None	None
V0126	Adenocarcinoma	Stage IA	Y	N	0.49	15	60	0	1	8	1.80	2	9	.45	1	Yes - Current Smoker	50	None	None	None
V0128	Adenocarcinoma	Stage IA	Y	N	0.77	10	50	0		8	1.04	3	8	.05		No - Quit Smoking	40	None	None	None
V0130	Adenocarcinoma	Stage IIB	Y	N	0.89	60	60	0	2	8	.80	3	8	.40		No - Quit Smoking	15	None	None	None
V0131	Adenocarcinoma: BAC features	Stage IB	Y	N	0.7	40	40	0	3	4	1.04	3	4	.39	2	Yes - Current Smoker	75	AR	Second-hand smoke	Second-hand smoke

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V0132	Adenocarcinoma	Stage IA	Y	N	0.36	90	70	0	1	4	.91	4	4	.16	1	No - Quit Smoking	15	None	None	None
V0133	Adenosquamous Carcinoma	Stage IA	Y	N	0.12	100	95	5	2		.40	2				Yes - Current Smoker	75	None	None	None
V0135	Squamous Cell Carcinoma	Stage IB	Y	N	1.42	90	70	10	5	4	1.40	6	4	1.52	3	No - Quit Smoking	64	AR	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0138	Adenosquamous Carcinoma	Stage IIA	Y	N	0.98	25	80	5	2	4	1.43	4	4	.35	2	No - Quit Smoking	22	None	None	None
V0139	Adenosquamous Carcinoma	Stage	Y	N	0.314	1	80	0	1		1.94	3		.125	1	No - Quit Smoking	1	None	None	None
V0141	Adenocarcinoma	Stage IIA	Y	N	1.32	50	50	0	3	4	.73	3	4	.67	2	No - Quit Smoking	40	None	None	None
V0142	Adenocarcinoma: BAC features	Stage IIB	Y	N	1.73	100	70	0	5	4	1.49	5	4	.20	1	No - Quit Smoking	50	AR	Agent Orange, Burn pits, Jet fuel, Second-hand smoke	Agent Orange, Burn pits, Jet fuel, Second-hand smoke
V0143	Adenocarcinoma	Stage IIB	Y	N	0.71	90	70	10	2	4	.4	2	4	.09	1	No - Quit Smoking	25	None	None	None
V0144	Squamous Cell Carcinoma	Stage IA	Y	N	0.055	60	70	0	1		.28	1				No - Quit Smoking	25	None	None	None
V0145	Adenocarcinoma: BAC features	Stage IA	Y	N	0.36	1	40	0	1		.25	1	4	.32	1	No - Quit Smoking	60	None	None	None
V0146	Carcinoid Tumor: Typical	Stage IA	Y	N	0.47	100	99	0	3	4	.95	3	4	.51	2	No - Quit Smoking	40	None	None	None
V0148	Adenocarcinoma: BAC features	Stage IA	Y	N	0.52	90	60	0	6	4	.48	6	4			Yes - Current Smoker	83	None	None	None
V0148	Adenocarcinoma: BAC features	Stage IA	Y	N	0.52	50	50	0	6	4	.48	6	4			Yes - Current Smoker	83	None	None	None
V0148	Adenocarcinoma: BAC features	Stage IA	Y	N	0.52	60	60	0	6	4	.48	6	4			Yes - Current Smoker	83	None	None	None
V0149	Squamous Cell Carcinoma	Stage IA	Y	N	0.22	70	70	25	1		.15	1				Yes - Current Smoker	30	None	None	None

Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
V0150	Carcinoid Tumor: Typical	Stage IA	Y	N	0.18	95	99	0	1		.98	3	4			Yes - Current Smoker	60	None	None	None
V0151	Squamous Cell Carcinoma	Stage IIA	Y	Y	0.33	1			1		1.6	3	4	.28	1	Yes - Current Smoker	90	None	None	None
V0152	Bronchioalveolar Carcinoma	Stage IA	Y	Y	0.29	50	60	0	1	4	.75	1	4	.07	1	No - Quit Smoking	15	None	None	None
V0153	Carcinoid Tumor: Typical	Stage IA	Y	N	0.018	5			1					.025	1	No - Quit Smoking	18	MR	Second-hand smoke	Second-hand smoke
V0155	Adenocarcinoma	Stage IB	Y	N	0.26	60	70	0	1	4	.28	1	4	.20	1	No - Quit Smoking	42	None	None	None
V0156	Adenocarcinoma	Stage IIA	Y	N	1.44	40	90	0	3	4	1.82	3	4	.78	2	No - Quit Smoking	15	AR	Second-hand smoke	Second-hand smoke
V0158	Adenocarcinoma	Stage IA	Y	N	0.15	85	75	0	1	4	.50	2	4	.07	1	Yes - Current Smoker	120	None	None	None
V0164	Adenocarcinoma	Stage IIA	Y	N	0.45	100	85	0	3	4	1.02	4	4			Never Smoked		None	None	None
V0165	Undifferentiated Carcinoma: Large Cell	Stage IV	Y	N	1.29	100	90	33	8	4	1.42	11	4	.21	2	No - Quit Smoking	23	None	None	None
V0165	Undifferentiated Carcinoma: Large Cell	Stage IV	Y	N	1.29	60	75	5	8	4	1.42	11	4	.21	2	No - Quit Smoking	23	None	None	None
V0166	Squamous Cell Carcinoma	Stage IIA	Y	N	0.98	50	80	0	2	4	.98	2	4	.24	2	Yes - Current Smoker	60	None	None	None
V0167	Adenocarcinoma	Stage IA	Y	N	0.072	98	70	0	1		.75	1		.076	1	Yes - Current Smoker	40	None	None	None
V0168	Adenocarcinoma	Stage IA	Y	N	0.39	100	85	0	3	4	.43	3	4	.25	2	No - Quit Smoking	40	None	None	None
V0169	Adenocarcinoma	Stage IA	Y	N	0.2	75	80	0	1		.09	1				No - Quit Smoking	53	None	None	None
V0171	Squamous Cell Carcinoma	Stage IIA	Y	N	0.62	50	85	5	1	4	1.14	2	4	1.01	2	No - Quit Smoking	45	NV	Agent Orange, Asbestos, Nuclear-powered engines.	Agent Orange, Asbestos, Nuclear-powered engines.

Subject ID	Tumor Dx	Clinical Stage	Frozen Tumor Collected	Pre-op Therapy	Initial Tumor Weight (g)	Tumor Area%	Tumor Cellularity%	Tumor Necrosis%	# Banked Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Tissue Weight (g)	# Banked Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Tissue Weight (g)	# Banked Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Service	Military Exposure	Civilian Exposure
V0173	Adenocarcinoma	Stage IA	Y	N	0.03	100	80	0	1		.075	1				Yes - Current Smoker	6	None	None	None
V0176	Squamous Cell Carcinoma	Stage IIA	N	N												No - Quit Smoking	104	None	None	None
V0178	Adenocarcinoma	Stage IIA	Y	Y	1.08	100	95	5	7	4	.87	6	4	.196	1	No - Quit Smoking	15	None	None	None
V0179	Adenocarcinoma	Stage IA	Y	N	0.73	50	50	0	1	4	1.43	4	4	.08	1	No - Quit Smoking	8	None	None	None
V0180	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.085	100	90	0	1		1.46	3		.29	2	Yes - Current Smoker	55	None	None	None
V0181	Small Cell Carcinoma	Stage IB	Y	N	1.28	100	60	5	7	5	1.51	7	4	.60	2	No - Quit Smoking	75	AR	Second-hand smoke	Second-hand smoke
V0182	Squamous Cell Carcinoma	Stage IIA	Y	N	1.24	100	80	0	7	4	1.96	7	4	.23	2	No - Quit Smoking	100	None	None	None
V0185	Squamous Cell Carcinoma	Stage IA	Y	N	0.24	50	75	20	1	4	1.68	1	4	.25	1	No - Quit Smoking	68	None	None	None
V0189	Carcinoid Tumor: Typical	Stage IA	Y	N	0.42	100	98	0	2	4	1.10	2	4	.087	1	Never Smoked		None	Second-hand smoke	Second-hand smoke
V0190	Squamous Cell Carcinoma	Stage IIB	Y	N	0.76	90	95	0	3	4	1.08	3	4			No - Quit Smoking	60	AR	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
V0191	Squamous Cell Carcinoma	Stage IA	Y	N	0.13	100	90	30	1		.63	2		.167	1	Yes - Current Smoker	55	None	None	None
V0194	Adenocarcinoma	Stage IIA	Y	Y	1.71	1	90	85	4		1.76	4		.15	1	No - Quit Smoking	40	None	None	None
V0195	Adenocarcinoma	Stage IB	Y	N	0.8	90	80	0	3	4	.75	3	4	.80	3	No - Quit Smoking	40	None	None	None
V0197	Squamous Cell Carcinoma	Stage IA	Y	N	0.75	100	70	2	3	4	1.55	3	4	.69	2	No - Quit Smoking	60	None	None	None
V0198	Adenocarcinoma	Stage IIA	Y	N	0.41	95	80	0	2	4	1.35	2	4	.098	1	No - Quit Smoking	38	None	None	None
V0201	Adenocarcinoma	Stage	Y	N	0.21	45	75	0	1		.63	1				No - Quit Smoking	38	None	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke



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V0203	Adenocarcinoma: BAC features	Stage IA	Y	N	0.61	90	85	0	4	4	.59	4	4	.43	2	Never Smoked		None	None	None
V0204	Adenocarcinoma	Stage	Y	N	0.02	20	50	0	1		.27	1				Yes - Current Smoker	75	AF	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0206	Adenocarcinoma	Stage IA	Y	N	0.08	90	90	0	1		.97	1		.057	1	No - Quit Smoking	72	None	None	None
V0208	Adenocarcinoma	Stage IA	Y	N	0.11	95	80	0			1.41	1		.36	1	Yes - Current Smoker	80	None	None	None
V0209	Adenocarcinoma	Stage IB	Y	N	1.02	95	85	0	5	4	1.34	5	4	.41	1	No - Quit Smoking	11	None	None	None
V0210	Squamous Cell Carcinoma	Stage	Y	N	2.96	100	20	40	7	4	3.29	7	4	.26	1	No - Quit Smoking	20	NV	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
V0213	Squamous Cell Carcinoma	Stage IB	Y	N	0.3	100	98	0	1	4	.74	1	4	.172	1	Yes - Current Smoker	40	None	None	None
V0214	Adenocarcinoma	Stage IA	Y	N	0.85	15	90	0	1		.35	1		.098	1	Yes - Current Smoker	34	None	None	None
V0215	Carcinoid Tumor: Typical	Stage IA	Y	N	0.39	100	90	0	1	4	.23	1	4	.165	1	No - Quit Smoking	8	None	None	None
V0216	Adenocarcinoma	Stage IB	Y	N	0.71	90	50	0	4	4	.76	4	4	.078	1	Never Smoked		None	None	None
V0218	Adenocarcinoma: BAC features	Stage IA	Y	N	0.38	40	80	0	1		1.20	2		.12	1	No - Quit Smoking	35	None	None	None
V0220	Adenocarcinoma	Stage IA	Y	N	1.01	45	80	0	3	4	2.25	6	4	.22	1	No - Quit Smoking	60	None	None	None
V0221	Adenocarcinoma: BAC features	Stage IA	Y	N	0.99	80	90	0	3	4	.95	6	4			No - Quit Smoking	60	None	None	None
V0224	Adenocarcinoma	Stage IA	Y	N	0.86	75	60	0	1	4	.22					No - Quit Smoking	80	None	None	None
V0225	Squamous Cell Carcinoma	Stage IA	Y	N	0.75	33	70	0	1		2.97	6		1.18	2	No - Quit Smoking	40	None	None	None
V0226	Undifferentiated Carcinoma: Large Cell	Stage IB	Y	N	1.01	100	95	60	4	4	.91	4	4	.43	2	No - Quit Smoking	38	None	None	None

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V0229	Squamous Cell Carcinoma	Stage IB	Y	N	1.4	100	80	5	7	4	.80	3	4	.10		No - Quit Smoking	50	NV	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
V0231	Adenocarcinoma	Stage IIA	Y	N	0.35	33	70	0	1		.25	1		.31		Yes - Current Smoker	28	None	None	None
V0232	Squamous Cell Carcinoma	Stage	Y	N	1.8	75	50	5			1.3			.33		Yes - Current Smoker	60	None	None	None
V0233	Squamous Cell Carcinoma	Stage IA	Y	N	0.32	90	50	5	2	4	.70	3	4	.17		Yes - Current Smoker	10	None	None	None
V0234	Adenocarcinoma	Stage IA	Y	Y	0.65	90	90	5	3	4	.48	3	4			Never Smoked		None	None	None
V0235	Adenocarcinoma: BAC features	Stage IA	Y	N	1.24	25	85	0	1		.49	2		.12	1	No - Quit Smoking	23	None	None	None
V0236	Squamous Cell Carcinoma	Stage IA	Y	N	0.62	100	60	10	3	4	.52	2	4	.35	1	Yes - Current Smoker	106	None	None	None
V0237	Squamous Cell Carcinoma	Stage IIB	Y	N	2.0	75	70	10	9	4	1.73	9	4	.06	1	No - Quit Smoking	33	None	None	None
V0240	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.13	40	95	0	1		.56	1		.23		No - Quit Smoking	4	None	None	None
V0241	Adenocarcinoma	Stage IIB	Y	N	0.68	5	95	0	1		.33	1				No - Quit Smoking	80	AR	Second-hand smoke	Second-hand smoke
V0242	Squamous Cell Carcinoma	Stage IA	Y	N	0.06	100	70	20	1		.16	1				No - Quit Smoking	51	MR	Second-hand smoke	Second-hand smoke
V0245	Adenocarcinoma	Stage IIB	Y	N	0.08	75	50	0	1		.25	1				No - Quit Smoking	57	None	None	None
V0247	Adenocarcinoma	Stage	Y	N	0.15	100	80	0	1		.48	1		.11	1	No - Quit Smoking	10	None	None	None
V0248	Adenocarcinoma	Stage IA	Y	N	1.43	95	80	0	7	4	.93	6	4	.11	1	Never Smoked		None	None	None
V0249	Adenocarcinoma: Mucinous Features	Stage IIA	Y	N	0.56	99	85	0	2	4	1.17	3	4	.25	1	No - Quit Smoking	25	None	None	None
V0251	Adenocarcinoma	Stage IA	Y	N	0.08	75	50	0	2		.31	1				No - Quit Smoking	94	None	None	None

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V0252	Squamous Cell Carcinoma	Stage IA	Y	N	0.83	20	50	10	1		.32	1		.13	1	No - Quit Smoking	30	None	None	None
V0253	Squamous Cell Carcinoma	Stage IA	Y	N	0.12	100	80	5	1		1.30	3		1.38	1	No - Quit Smoking	66	None	None	None
V0256	Adenocarcinoma	Stage IIA	Y	N	1.8	100	60	0	6	4	1.22	4	4	.219	1	Never Smoked		None	None	None
V0257	Adenocarcinoma	Stage IIA	Y	N	0.69	100	85	0	3	4	.68	2	4	.187	1	No - Quit Smoking	68	None	None	None
V0259	Adenocarcinoma	Stage	Y	N	1.39	85	30	5	6	4	1.17	7	4	.54	2	No - Quit Smoking	25	None	None	None
W0001	Squamous Cell Carcinoma	Stage IB	Y	N	0.98	40	80	5	1	2	1.710	2		0.250	2	Yes - Current Smoker		None	None	None
W0002	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.24	80	50	0	2	3	0.370	1	4	0.050	2	No - Quit Smoking	35	None	None	None
W0004	Adenocarcinoma	Stage IB	Y	N	1.25	95	60	10	9	3	0.630	1		0.830	3	No - Quit Smoking	45	AR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0007	Adenocarcinoma	Stage IA	Y	N	0.14	60	70	5	2	3	0.530	2		0.370	2	Yes - Current Smoker		None	None	None
W0008	Small Cell Carcinoma	Stage	Y	N	0.2	85	90	30	2	7	0.370	1	8	0.090	2	Yes - Current Smoker		None	None	None
W0010	Carcinoid Tumor: Typical	Stage IA	Y	N	0.16	100	95	0	3	3	0.090	4		0.030	1	Never Smoked		None	None	None
W0011	Neuroendocrine Carcinoma: Large Cell	Stage IA	Y	N	0.24	90	90	30	2	3	0.220	3				Yes - Current Smoker		None	None	None
W0013	Adenocarcinoma	Stage IB	Y	N	0.8	100	70	25	2		1.130	4	3	0.360	3	No - Quit Smoking	44	None	None	None
W0014	Squamous Cell Carcinoma	Stage IB	Y	N	0.26	100	80	30	2	2	0.230	3				Yes - Current Smoker		None	None	None
W0015	Adenocarcinoma	Stage IA	Y	N	0.06	100	40	0	2		0.070	2				Yes - Current Smoker		None	None	None

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W0016	Adenocarcinoma	Stage IA	Y	N		100	60	0	1	3	0.100	2		0.050	2	Never Smoked		None	None	None
W0019	Squamous Cell Carcinoma	Stage	Y	N	0.8	100	60	0	4	3	0.980	5		0.630		No - Quit Smoking	23	None	None	None
W0020	Squamous Cell Carcinoma	Stage IIA	Y	N	0.98	80	80	10	4	3	0.710	4	4	0.180	3	No - Quit Smoking	15	None	None	None
W0021	Adenocarcinoma	Stage IA	Y	N	0.19	95	90	0	1	3	0.300	1				No - Quit Smoking	60	None	None	None
W0022	Squamous Cell Carcinoma	Stage IA	Y	N	0.23	100	60	20	2	3	0.460	3				Yes - Current Smoker		None	None	None
W0023	Squamous Cell Carcinoma	Stage IB	Y	N	0.65	60	50	5	3	3	0.280	4				Yes - Current Smoker		None	None	None
W0024	Adenocarcinoma	Stage IIIB	Y	N	0.37	60	70	0	1	3	0.420	2	4			No - Quit Smoking	30	None	None	None
W0025	Adenocarcinoma	Stage IA	Y	N	0.15	90	50	20	1	3	0.100	1	4			No - Quit Smoking	24	None	None	None
W0026	Squamous Cell Carcinoma	Stage	Y	N	0.89	70	70	25	3	3	0.680	4		0.250	3	Yes - Current Smoker	36	None	None	None
W0028	Squamous Cell Carcinoma		Y	N	0.11	100	40	50	1	3	0.250	2	4			No - Quit Smoking	90	None	None	None
W0029	Neuroendocrine Carcinoma: Large Cell	Stage IA	Y	N	0.35	100	85	40	2	3	1.240	3	4	0.250	2	No - Quit Smoking		None	None	None
W0030	Adenocarcinoma	Stage IIA	Y	N		100	30	30	4	3		1	4	0.156	2	No - Quit Smoking	35	AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
W0032	Adenocarcinoma	Stage IA	Y	N	0.45	100	80	0	1	3	0.145	2				No - Quit Smoking	30	None	None	None
W0033	Adenocarcinoma	Stage IB	Y	N	0.76	100	60	0	4	3	1.180	4	4	0.350	3	No - Quit Smoking	81	None	None	None
W0036	Squamous Cell Carcinoma	Stage	Y	N	1.12	60	50	5	2	3	1.300	2		0.500	2	Yes - Current Smoker	96	None	None	None

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W0038	Adenocarcinoma	Stage IIA	Y	N	0.33	60	50	0	2	3	0.080	1	4			No - Quit Smoking	50	MR	None	None
W0039	Squamous Cell Carcinoma	Stage IB	Y	N	0.76	100	70	5	4	3	0.590	3	4	0.210	2	No - Quit Smoking	30	None	None	None
W0042	Adenocarcinoma	Stage IIB	Y	N	0.31	60	60	0	1	3	0.120	1	4			No - Quit Smoking		None	None	None
W0043	Adenocarcinoma	Stage	Y	N	0.34	60	40	0	1	3	0.480	2		0.150	2	No - Quit Smoking	33	None	None	None
W0044	Adenocarcinoma	Stage IA	Y	N	0.27	60	70	0	1	3	0.170	2				Yes - Current Smoker	80	None	None	None
W0045	Adenocarcinoma	Stage IB	Y	N	0.36	85	50	0	2	3	0.550	1	4	0.100	2	No - Quit Smoking	40	MR	None	None
W0046	Adenocarcinoma	Stage IIB	Y	N	0.96	100	30	0	6	3	0.380	4		0.200	2	No - Quit Smoking		None	None	None
W0047	Squamous Cell Carcinoma	Stage IIA	Y	N	1.31	100	60	5	6	3	1.310	5	4	0.230	2	No - Quit Smoking	120	None	None	None
W0051	Adenocarcinoma	Stage IA	Y	N	0.22	90	40	0	2	3	0.400	3				Yes - Current Smoker		None	None	None
W0052	Adenocarcinoma	Stage IB	Y	N	0.08	100	50	0	2		0.056	2				No - Quit Smoking	100	None	None	None
W0053	Squamous Cell Carcinoma	Stage	Y	N	0.29	95	70	5	3	3	0.630	3	4			No - Quit Smoking	50	None	None	None
W0054	Adenocarcinoma	Stage IIA	Y	N	0.026	60	40	5	2		0.067	2		0.017	2	No - Quit Smoking		None	None	None
W0055	Squamous Cell Carcinoma	Stage IIA	Y	N	0.54	100	70	80	4	3		3		.077	1	Yes - Current Smoker	40	None	None	None
W0057	Adenocarcinoma	Stage	Y	N	0.32	1	2	0	1		.32	2		.25	2	No - Quit Smoking	50	None	None	None
W0058	Squamous Cell Carcinoma	Stage IV	Y	Y	0.22	95	70	15	2	2	.19	3		.08	1	Yes - Current Smoker	50	None	None	None

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W0060	Adenocarcinoma	Stage IB	Y	N	0.25	60	50	0	2	3	.31	3		.19	1	Never Smoked		None	None	None
W0062	Adenocarcinoma	Stage	Y	N	0.14	90	60	0	1	3	.23	1		.11	1	Never Smoked		None	None	None
W0063	Adenocarcinoma	Stage IA	Y	N		90	25	0	2	3	.22	2	4			No - Quit Smoking		None	None	None
W0064	Adenocarcinoma	Stage IA	Y	N	0.3	100	30	0	3	3	.09		4			No - Quit Smoking	50	AR	Second-hand smoke	Second-hand smoke
W0066	Adenocarcinoma	Stage IIB	Y	N	0.36	85	40	15	3	3	.49	4		.13	1	No - Quit Smoking		None	None	None
W0067	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.14	90	70	0	1	3	.23	1		.08	1	No - Quit Smoking	24	None	None	None
W0070	Adenocarcinoma	Stage IIB	Y	N	1.03	95	75	0	3	10	.75	3	8			No - Quit Smoking		AR	None	None
W0071	Squamous Cell Carcinoma	Stage	Y	N	0.56	90	50	5	2	7	.57	3	10	.25	2	No - Quit Smoking	50	None	None	None
W0072	Adenocarcinoma	Stage	Y	N	0.2	90	30	0		5	.62	1	5	.29	1	No - Quit Smoking	45	None	None	None
W0074	Squamous Cell Carcinoma	Stage	Y	N	1.89	100	25	10		2	.92	1	5	.16	2	No - Quit Smoking	35	AR	Second-hand smoke	Second-hand smoke
W0076	Adenocarcinoma	Stage IV	Y	N	0.32	100	20	0	1	8	.34	1	5			No - Quit Smoking	50	None	None	None
W0079	Squamous Cell Carcinoma	Stage IA	Y	N	0.28	70	60	2		5		3	4	.15	1	No - Quit Smoking		None	None	None
W0079	Squamous Cell Carcinoma	Stage IA	Y	N	0.28	70	60	2		5		3	4	.15	1	No - Quit Smoking		None	None	None
W0080	Adenocarcinoma	Stage IV	Y	N	0.18	20	10	50	1		.26	1				No - Quit Smoking		None	None	None
W0081	Adenocarcinoma	Stage IIA	Y	N	0.77	100	70	30	3	4	.58	3	8	.086	1	Yes - Current Smoker	140	NV	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
W0082	Adenocarcinoma	Stage IB	Y	N	0.18	90	60	2		10	.34		10			No - Quit Smoking	89	AF	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke

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W0082	Adenocarcinoma	Stage IB	Y	N	0.18	90	60	2		10	.34		10			No - Quit Smoking	89	AF	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
W0084	Squamous Cell Carcinoma	Stage IA	Y	N	0.21	70	70	20	1	4	.22	1	4			No - Quit Smoking	60	AF	Second-hand smoke	Second-hand smoke
W0087	Small Cell Carcinoma	Stage IIB	Y	N	0.26	65	85	5	1	5	.84	1	4			No - Quit Smoking	40	MR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0089	Squamous Cell Carcinoma	Stage IA	Y	N	0.46	20	75	15	2	4	3.07	3	4	.23	1	No - Quit Smoking	40	None	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0094	Adenocarcinoma	Stage IA	Y	N	0.36	90	70	2	2	4	.21	5	8		2	Yes - Current Smoker		None	None	None
W0095	Adenocarcinoma	Stage IA	N	N							1.35	3		.11	1	Yes - Current Smoker		None	Second-hand smoke	Second-hand smoke
W0096	Squamous Cell Carcinoma	Stage IIA	Y	N	0.49	90	70	20	2	3	.84	3	3	.21	1	Yes - Current Smoker		None	None	None
W0097	Undifferentiated Carcinoma: Large Cell		Y	N	0.57	100	50	10	3	9	1.18	3	8	.32	1	No - Quit Smoking	94	None	None	None
W0098	Adenocarcinoma	Stage IA	Y	N	0.26	40	75	2		8	2.26	2	8	.256	1	Yes - Current Smoker		AR	Second-hand smoke	Second-hand smoke
W0100	Adenocarcinoma	Stage	Y	N	0.25	60	60	2	1	8	1.90	2	8	.335	1	No - Quit Smoking	120	None	None	None
W0102	Adenocarcinoma	Stage	Y	N	1.27	60	60	15	3	8	.75	3	8	.17	1	No - Quit Smoking	20	AR	Second-hand smoke	Second-hand smoke
W0103	Adenocarcinoma	Stage IA	Y	N	0.2	60	40	40	1		.53	2	8	.138	1	No - Quit Smoking	60	None	None	None
W0105	Bronchioalveolar Carcinoma	Stage IIB	Y	N	1.69	95	80	0	7	9	1.08	4	8	.051	1	No - Quit Smoking	25	None	None	None
W0107	Adenocarcinoma	Stage IB	Y	N	0.52	95	60	0	4	8	.44	3	8	.10	1	Never Smoked		None	None	None
W0109	Adenocarcinoma	Stage IIB	Y	N	1.2	100	60	15	3	4	.78	3	4	.27	1	No - Quit Smoking	20	None	None	None

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W0111	Adenocarcinoma	Stage IA	Y	N	0.22	60	70	0	1		.90	3		.018	1	No - Quit Smoking	34	None	None	None
W0112	Adenocarcinoma	Stage IB	Y	Y	0.39	90	50	30	1	4	1.03	2	4	.26	1	No - Quit Smoking	24	AR	Second-hand smoke	Second-hand smoke
W0113	Adenocarcinoma	Stage	Y	N	0.16	70	80	10	1		.195	1				No - Quit Smoking	30	None	None	None
W0114	Adenocarcinoma	Stage	Y	N	0.39	100	80	10	2	4	1.52	2	4			No - Quit Smoking	7	AF	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0115	Squamous Cell Carcinoma	Stage IA	Y	N	0.045	100	85	5	1		.137	1				No - Quit Smoking		None	None	None
W0116	Adenocarcinoma	Stage IIA	Y	N	0.24	20	40	0	1		.64	2		.15	1	No - Quit Smoking	25	None	None	None
W0119	Adenocarcinoma	Stage IA	Y	N	0.29	100	10	0	1	4	.75	1	4	.11	1	No - Quit Smoking	60	None	None	None
W0120	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.09	25	70	0	1		.28	1		.12	1	Never Smoked		None	None	None
W0122	Undifferentiated Carcinoma: Large Cell	Stage IB	Y	N	0.31	100	80	10	1	4	.61	2	4			Never Smoked		AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
W0125	Mucoepidermoid Carcinoma	Stage IA	Y	N	0.124	70	40	0	1		.26	1				No - Quit Smoking	15	None	None	None
W0128	Small Cell Carcinoma	Stage IIA	Y	N	0.55	90	70	15	3	9	.52	3	8	.26	2	Yes - Current Smoker	40	NV	Asbestos, Nuclear weapons, Second-hand smoke	Asbestos, Nuclear weapons, Second-hand smoke
W0129	Undifferentiated Carcinoma: Large Cell	Stage IIA	Y	N	0.32	100	50	40	1		.40	1		.18	1	No - Quit Smoking	90	None	None	None
W0131	Adenocarcinoma	Stage IIA	Y	N	0.12	90	75	0	1		.126	1				Yes - Current Smoker	5	AR	Second-hand smoke	Second-hand smoke
W0135	Squamous Cell Carcinoma	Stage IB	Y	N	0.3	100	50	20	1	4	.16	1	4	.05	1	No - Quit Smoking	125	CG	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0139	Squamous Cell Carcinoma	Stage IB	Y	N	0.51	50	60	10	1	4	.54	1	4			No - Quit Smoking	68	None	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0142	Adenocarcinoma	Stage	Y	N	0.42	60	40	10	3	4	.78	3		.13	1	Yes - Current Smoker	75	None	None	None



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W0143	Adenocarcinoma	Stage IIA	Y	N	0.5	60	70	0	2	4	.52	3	4	.14	1	Yes - Current Smoker	18	None	None	None
W0144	Adenocarcinoma	Stage	Y	N	0.29	90	70	5	1	4	.70	1	4	.10	1	Never Smoked		None	None	None
W0145	Squamous Cell Carcinoma	Stage IIA	Y	N	0.25	100	90	5	1	4	.26	1	4			No - Quit Smoking	40	None	None	None
W0151	Adenocarcinoma		Y	N	0.51	100	30	0	2	4	.76	2	4	.10	1	No - Quit Smoking	43	None	None	None
W0152	Adenocarcinoma	Stage	Y	N	1.17	95	90	0	3	4	.77	3	4	.40	1	Never Smoked		None	None	None
W0153	Adenocarcinoma	Stage	Y	N	1.18	100	95	5	7	4	1.04	7	4	.185	1	No - Quit Smoking	150	AR	Second-hand smoke	Second-hand smoke
W0159	Carcinoid Tumor: Typical	Stage IA	Y	N	0.04	100	95	0	1		.36	1		.025	1	Never Smoked		None	None	None
W0161	Adenocarcinoma	Stage IA	Y	N	0.05	100	50	0	1		.094	1				Yes - Current Smoker	112	None	None	None
W0162	Adenocarcinoma: Mucinous Features	Stage IA	Y	N	0.23	90	80	0	1		.22	1				Never Smoked		None	None	None
W0163	Neuroendocrine Carcinoma: Large Cell	Stage	Y	N	0.9	100	95	50	3	4	1.06	3	4	.16	1	Yes - Current Smoker	75	None	None	None
W0165	Squamous Cell Carcinoma	Stage IIB	Y	N	0.39	100	80	0	1	4	.29	1	4			Yes - Current Smoker		None	None	None
W0166	Sarcomatoid Carcinoma	Stage IB	Y	N	0.5	100	95	5	3	4	.37	2	4			No - Quit Smoking	74	None	Sarin or chemical weapons, Second-hand	Sarin or chemical weapons, Second-hand
W0168	Adenocarcinoma	Stage IA	Y	N	0.16	80	75	0	1		.024	1				No - Quit Smoking	68	None	None	None
W0173	Squamous Cell Carcinoma	Stage IA	Y	N	0.137	100	20	0	1		.33	1		.10	1	Yes - Current Smoker	52	None	None	None
W0177	Carcinoid Tumor: Typical	Stage IA	Y	N	0.065	100	98	0	1		.185	1				Never Smoked		None	None	None
W0179	Carcinoid Tumor: Typical	Stage IIB	Y	N	0.14	100	100	0	1		.10	1				Never Smoked		None	None	None

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W0180	Adenocarcinoma	Stage IIB	Y	N	0.08	100	40	5	1		.16	1				No - Quit Smoking	40	None	None	None
W0181	Squamous Cell Carcinoma	Stage IA	Y	N	0.05	100	70	5	1		.25	1				No - Quit Smoking	76	None	None	None
W0182	Squamous Cell Carcinoma		Y	N	0.11	90	20	0	1		.31	1				No - Quit Smoking	31	None	None	None
W0183	Adenocarcinoma	Stage IIA	Y	N	0.085	100	90	0	1		.055	1				Never Smoked		None	None	None
W0185	Squamous Cell Carcinoma	Stage	Y	N	0.73	50	60	10	2	4	1.42	2	4	.29	1	No - Quit Smoking	81	None	None	None
W0187	Squamous Cell Carcinoma	Stage	Y	N	0.31	90	85	0	1	4	.67	1	4	.16	1	No - Quit Smoking	5	None	None	None
W0189	Squamous Cell Carcinoma	Stage IA	Y	N	0.07	100	90	5			.065	1				No - Quit Smoking	68	AR	Second-hand smoke	Second-hand smoke
W0190	Carcinoid Tumor: Typical	Stage IA	Y	N	0.18	85	98	0	1		.26	1		.21	1	Never Smoked		None	None	None
W0194	Adenocarcinoma	Stage IIB	Y	N	0.24	85	75	80	1		.20	1		.10	1	No - Quit Smoking	103	None	None	None
W0196	Carcinoid Tumor: Typical	Stage IIB	Y	N	0.2	100	80	0	1	4	.21	1	4	.08	1	Never Smoked		None	None	None
W0197	Squamous Cell Carcinoma	Stage IIA	Y	N	0.38	100	45	10	1	4	.22	1	4			Yes - Current Smoker	16	None	None	None
W0199	Adenocarcinoma	Stage IIB	Y	N	1.16	100	90	0	6	4	.62	3	4			Yes - Current Smoker	51	None	None	None
W0200	Adenocarcinoma: Mucinous Features	Stage IIB	Y	N	0.43	100	95	0	1	4	.42	1	4	.10	1	Yes - Current Smoker	40	None	None	None
W0201	Bronchioalveolar Carcinoma	Stage IIB	Y	N	0.29	95	90	0	1	4	.24	1	4	.12	1	Never Smoked		None	None	None
W0202	Squamous Cell Carcinoma	Stage	Y	N	0.55						.45	4		.215	1	Yes - Current Smoker	100	None	None	None
W0203	Squamous Cell Carcinoma	Stage IB	Y	N	0.41	100	50	0	3	4	.92	3	4	.23	1	Yes - Current Smoker	20	None	None	None

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W0208	Adenocarcinoma	Stage IIA	Y	N	0.21	100	40	0	1	4	.33	1	4	.118	1	No - Quit Smoking	68	None	None	None
W0209	Adenocarcinoma	Stage IB	Y	N	0.22	33	30	0	1		.13	1		.33	1	No - Quit Smoking	60	None	None	None
W0210	Adenocarcinoma	Stage IIA	Y	N	0.26	45	50	0	1		.147	1				No - Quit Smoking	56	AF	Agent Orange, Asbestos, Burn pits, Jet fuel, Radon, Second-hand smoke, Tricir waste	Agent Orange, Asbestos, Burn pits, Jet fuel, Radon, Second-hand smoke, Tricir
W0211	Sarcomatoid Carcinoma	Stage IIA	Y	N	0.63	100	95	5	3	4	.50	2	4	.15	1	Yes - Current Smoker	60	None	None	None
W0213	Adenosquamous Carcinoma	Stage IA	Y	N	0.24	100	95	0	1	4	.18	1	4			Never Smoked		None	None	None
W0215	Squamous Cell Carcinoma	Stage IB	Y	N	0.12	100	75	0			.22	1				No - Quit Smoking	120	None	Second-hand smoke	Second-hand smoke
W0216	Adenocarcinoma	Stage IB	Y	N	0.14						.16			.04		Never Smoked		None	None	None
W0217	Adenocarcinoma	Stage IA	Y	N	0.35	80	30	0	1	4	.22	1	4			No - Quit Smoking	40	MB	Asbestos, Depleted Uranium, Jet fuel, Nuclear weapons, Nuclear-powered engines	Asbestos, Depleted Uranium, Jet fuel, Nuclear weapons, Nuclear-powered engines
W0218	Squamous Cell Carcinoma	Stage IA	Y	N	0.098	100	80	0	1		.20	1				No - Quit Smoking	20	NG	Second-hand smoke	Second-hand smoke
W0220	Adenocarcinoma	Stage IA	Y	N	1.26	100	33	0	2	4	1.20	2	4			No - Quit Smoking	60	NV	Second-hand smoke	Second-hand smoke
W0221	Carcinoid Tumor: Typical	Stage IA	Y	N	0.08	100	99	0	1		.05	1				Never Smoked		AR	Burn pits, Jet fuel, Sarin or chemical weapons.	Burn pits, Jet fuel, Sarin or chemical weapons.
W0222	Squamous Cell Carcinoma	Stage IIB	Y	N	0.55	90	90	20	2	4	.32	1	4			No - Quit Smoking	75	None	None	None
W0224	Squamous Cell Carcinoma		Y	N	0.12	100	90	0	1		.10	1				No - Quit Smoking	35	None	None	None
W0228	Squamous Cell Carcinoma	Stage IB	Y	N	0.46	40	70	25	1		.36	1				No - Quit Smoking	48	None	None	None
W0231	Adenocarcinoma	Stage IA	Y	N	0.107	95	80	0	1		.16	1				No - Quit Smoking	80	None	Agent Orange, Jet fuel, Second-hand smoke	Agent Orange, Jet fuel, Second-hand smoke

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W0232	Adenocarcinoma	Stage IA	Y	N	0.28	90	85	0	1	4	.52	1	4			No - Quit Smoking	50	AR	Sarin or chemical weapons, Second-hand	Sarin or chemical weapons, Second-hand
W0233	Sarcomatoid Carcinoma	Stage IA	Y	N	0.086	100	95	0	1		.15					Yes - Current Smoker	41	None	None	None
W0234	Adenocarcinoma	Stage IA	Y	N	0.03	100	80	0	1		.06	1				No - Quit Smoking	20	NG	Second-hand smoke	Second-hand smoke
W0235	Adenocarcinoma	Stage IA	Y	N	0.14	100	50	0	1		.115	1				Never Smoked		None	None	None
W0236	Squamous Cell Carcinoma	Stage	Y	N	0.098	100	50	0	1		.16	1				Yes - Current Smoker	100	None	None	None
W0237	Adenocarcinoma	Stage IA	Y	N	0.082	100	30	0	1		.14	1				Never Smoked		None	None	None
W0238	Squamous Cell Carcinoma	Stage IB	Y	N	1.36	100	30	10	7	4	.87	5	4	.25	1	Yes - Current Smoker	126	None	None	None
W0241	Adenocarcinoma	Stage IA	Y	N	0.097	40	75	0			.24					No - Quit Smoking	30	None	None	None
W0243	Squamous Cell Carcinoma	Stage IA	Y	N	0.25	95	50	5	1	4	.70	1	4			Yes - Current Smoker	150	None	None	None
W0244	Adenocarcinoma	Stage IA	Y	N	0.1	98	75	0	1		.24	1		.14	1	No - Quit Smoking	60	None	None	None
W0246	Squamous Cell Carcinoma	Stage IB	Y	N	0.14	90	30	5	1		.39	1				No - Quit Smoking	75	CG	Second-hand smoke	Second-hand smoke
W0247	Squamous Cell Carcinoma	Stage IIB	Y	N	0.08	95	50	5	1		.14	1				No - Quit Smoking	102	NV	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines
W0248	Squamous Cell Carcinoma	Stage IIA	Y	N	0.24	100	40	20	1	4	.23	1	4			No - Quit Smoking	60	None	Second-hand smoke	Second-hand smoke